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AN EXPERIMENTAL JUNIOR HIGH SCHOOL COURSE IN OCCUPATIONAL OPPORTUNITIES AND LABOR MARKET PROCESSES. FINAL REPORT.

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An experimental project was initiated to provide the schools with instructional materials, evaluation instruments and a realistic classroom educational program for bridging the gap between school and work. Some major objectives were to: (1) identify appropriate course content for economic and manpower education, (2) develop instructional materials, and (3) develop evaluation instruments and procedures. Eighth, 9th and 10th grade classes in three school systems within a 75-mile radius of Athens, Ohio were selected for the pilot project. Pre and post tests designed to measure understandings and attitudes were administered to treatment and control groups matched on mental ability and socioeconomic characteristics. Some conclusions were: (1) Eighth graders enrolled in the experimental course increased their test scores by 33.4 percent more than the control group, (2) The experimental course did not induce changes in student attitude toward manpower and economic issues, and (3) Students enrolled in the experimental course reflected more interest in school and a lower dropout rate. The appendixes contain 316 pages of textual material, the 140-page teacher manual, and evaluation instruments. (DM)

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*"An Experimental Junior High School Course in Occupational Opportunities and Labor Market Processes"*
Robert L. Darcy and Phillip E. Powell
Office of Education Grant Number OEC 3-6-051203-2080
The Vocational Education Act of 1963, P. L. 88-210, section 4 (c)
Ohio University, June 26, 1968

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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# Final Report

# on the MD/OAEL Project

## (Manpower Development: Opportunities in American Economic Life)

Principal Investigator: ROBERT L. DARCY
Associate Investigator: PHILLIP E. POWELL

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*A two-year research and curriculum development program carried out by the Center for Economic Education, Ohio University, Athens, Ohio*

# SUMMARY OF PROJECT

Grant Number: OEG-3-6-051203-0280

Title: "An Experimental Junior High School Course in Occupational Opportunities and Labor Market Processes"

Principal Investigator: Robert L. Darcy

Institution: Ohio University

Duration: June 22, 1966 through June 30, 1968

* * *

PURPOSE AND OBJECTIVES. The purpose of this project is to help schools improve the preparation of young people for effective participation in the changing economy and world of work. In the now familiar language of the 1967 "Manpower Report of the President", our objective is to help "bridge the gap between education and work" -- by providing the schools with instructional materials, evaluation instruments, and a realistic, classroom-tested educational program for manpower and economic education.

Our assumption is that young people will be better prepared for successful participation in the labor force by developing understandings about the nature and operation of our economic system, the role of work, changing technology and occupational opportunities, decisionmaking procedures, the economic value of education, and labor market processes. They will also benefit from self-examination of their own attitudes, values, goals, and behavior relative to career planning, occupational success, economic life, social roles, individual development, and self-fulfillment. An educational program of this type can meet an important need for male and female students of all socio-economic groups, and especially for disadvantaged youth whose knowledge of occupational opportunities and labor market processes may otherwise be quite limited or distorted.

A major hypothesis of the experiment is that economic and manpower education will indeed "make a difference" with respect to the understanding, attitudes, and behavior of young people exposed to the instructional treatment.

Specific objectives of the project are to:

1 -- Identify the appropriate content for a junior or senior high school course aimed at bridging the gap between school and work;

2 -- Determine the feasibility of introducing a separate course in manpower and economic education into the school curriculum, and at what grade level and under what teacher-subject aegis;

3 -- Write a set of instructional materials or self-contained course ("Manpower Development: Opportunities in American Economic Life") incorporating the appropriate information and concepts in a form suitable for experimental use in the schools;

4 -- Develop valid and reliable evaluation instruments and procedures to test the pre-treatment and post-treatment understanding, attitudes, and behavior of students with respect to manpower and economic concerns;

5 -- Field-test the instructional materials and evaluation procedures in a number of schools;

6 -- Analyze the results of field-testing;

7 -- Disseminate the experimental findings and the instructional and evaluation materials to the educational community at large in order to encourage additional experimentation, use, and improvement of the program.

PROCEDURES. Work began on the project July 1, 1966. During the first six months, the staff surveyed the literature in manpower economics, vocational guidance, occupations, psychological and sociological aspects of work, vocational education, decisionmaking, technological change, economic returns to education, and evaluation techniques relative to measuring changes in student understanding, attitudes, and behavior. A detailed classification system was devised by subject matter, and card files were set up (indexed by author and topic) for reference use in subsequent writing of technical papers and instructional (student and teacher) materials. Simultaneously, preliminary contacts were made with school systems to determine feasibility of their participation in field-testing the experimental one-semester course. By the end of December, three school systems within a 75-mile radius of Athens (Ohio University's main campus) had been tentatively selected for this purpose: Zanesville, Lancaster, and Columbus.

In the next six months (January through June, 1967), the staff continued its research activity and meetings with consultants in education, guidance, manpower economics, and related fields in order to define the specific content of the course. In addition, the first technical papers (one on evaluation of attitudes and the other on psychological dimensions of work) and instructional materials were written. Formal agreements were completed with the three school systems selected for cooperation in field-testing the course, and arrangements were made to provide the prospective teachers with six weeks of training in manpower economics by enrolling them in an NDEA Institute in Economics held on the Ohio University campus June 19 to July 28, 1967. The project staff held three special orientation meetings with this group of teachers during the period of the Institute.

Three basic evaluation instruments -- "Manpower Economics Test of Understanding"; "Survey of Manpower & Economic Attitudes"; and "Pupil Personnel Information Form" -- were designed and pilot-tested in schools not otherwise involved with the experiment. (The instruments, as described on form SF-83, were approved for use July 17, 1967, by the Office of Education.)

Between July 1 and December 31, 1967, the remaining instructional materials were written and reproduced by mimeograph, pre-test of understanding and attitude were administered to treatment and control groups (matched by tests of mental ability and socio-economic characteristics), and the course was field-tested in six junior high schools in Zanesville and Lancaster (at the eighth grade level); one junior high in Columbus (at the ninth grade level); and one senior high school in Lancaster (tenth graders identified as potential dropouts).

Prior to the opening of school, a conference was held August 25-26 in Athens for 12 of the 13 teachers, guidance counselors, and school coordinators directly involved in the project. Each teacher was provided with a complete set of the 26 books and other publications included in the "Basic Manpower Economics Library" that was compiled by the project staff and consultants to provide background and reference materials for teachers and guidance counselors involved in the experimental course. Use of the "Basic Library" was explained, the basic themes of the experimental course (code name, "MD/OAEL" for "Manpower Development: Opportunitess in American Economic Life") were reviewed, evaluation procedures outlined, and questions answered and discussed on every aspect of the field-testing during the fall semester of the 1967-68 school year.

In January, 1968, field-testing of the experimental course was completed and post-tests of understanding and attitude were administered to treatment and control groups in all three participating school systems. Efforts were begun immediately to evaluate the project and to provide for prompt dissemination of a revised experimental edition of the instructional materials.

* * *

RESULTS AND CONCLUSIONS. Following is a summary of the principal findings of this experimental project in terms of the seven specific objectives identified above.

1. CONTENT OF A COURSE IN MANPOWER AND ECONOMIC EDUCATION. Seven major themes and topics were identified as appropriate for a junior or senior high school course having the goal of helping to bridge the gap between school and work. These are:

- The World of Economics (with emphasis on the structure and operation of the American economy);
- The Nature of Work (including both its economic and noneconomic aspects);
- Decisionmaking and Planning (with applications of the five steps in economic reasoning to occupational choice and career planning);
- The Manpower Market (supply and demand forces influencing the job market);
- Occupations and Employment Trends (knowledge of the different types of job opportunities and the skills required);
- Skills and the Economic Value of Education(emphasizing the importance of schooling and training for developing manpower skills that are valued in the economy and also the benefits that individuals and society derive from education);
- Technology and Change (showing technological progress as a change-inducing force that creates both opportunities and challenges).

Based on our review of the professional and popular literature and the reactions of students, teachers, guidance counselors, school administrators, and specialists in a number of manpower-related fields, we are confident that this list of seven topics and themes includes all of the basic content that should be included in a manpower/economic education course and does not include material that is extraneous or irrelevant.

2. FEASIBILITY OF A MANPOWER/ECONOMIC EDUCATION COURSE. The experimental project suggests that it is indeed feasible, and we believe desirable, to provide for a special course of this type in the school curriculum. We do not feel that we can offer a universal recommendation as to the exact grade level, length of course, or teacher-subject-area responsibility for the course. Experience with this project demonstrates that a one-semester course in manpower/economic education can be introduced as a required course for eighth-grade students (also ninth graders

and tenth graders) under a variety of circumstances with favorable student, teacher, and administrative reaction. However, a curriculum innovation of this type is not easily accomplished. Numerous problems may arive with respect to scheduling, staffing, community relations, etc. In the experimental program, scheduling appeared to pose the most serious difficulties.

Our principal conclusion tentatively is that the course has an important role to play in the school curriculum, but whether it is taught at the eighth, ninth, tenth, eleventh, or twelfth grade (or, as some educators have suggested, even at the sixth or seventh grade), and whether it is taught by a social studies, business education, vocational education, or other teacher, or by a vocational guidance counselor, or by a teacher-counselor team, is a matter to be decided locally by each school or school system, based on local circumstances. Whether it is scheduled as a one-semester course with daily meetings, or a two-semester course meeting daily or less frequently, with or without visiting speakers, films, and field trips again is a matter for local discretion. The course is not designed for independent study, nor is it strictly or even primarily for students who do not plan to go to college. We regard it essentially as a student-centered course in the liberal arts tradition dealing with a very practical and relevant subject: the role of work in the life of man.

3. PREPARATION OF INSTRUCTIONAL MATERIALS. The most tangible outcome of the project is the development of a 316-page course entitled Manpower & Economic Education: Opportunities in American Economic Life, along with a companion 140-page Teacher Manual. These materials were all newly-written and used in mimeograph form as individual daily lesson units during the field-testing. The course consists of 75 individual lessons, each of which contains a one-paragraph abstract indicating the key ideas and facts to be studied in the lesson, followed by the main text of the lesson (typically with statistical data and discussion questions), and finally a summary paragraph entitled "Today's Lesson in Brief" that recapitulates and emphasizes the most essential understandings that students should learn from the lesson. (Students retained the lesson units in a three-ring binder provided as part of the experimental project.)

The Teacher Manual (originally referred to as "Teacher Supplementary Materials") provides supplementary information for each lesson, including suggested readings and references and answers to questions appearing in the lessons.

4. EVALUATION PROCEDURES. Since a major purpose of the project was to test the hypothesis that manpower/economic education does indeed make a difference in terms of the understanding, attitudes, and behavior of students who are exposed to the instructional treatment, it was necessary to devise methods of measuring changes in these three dependent variables. A 40-item multiple choice "Manpower Economics Test of

Understanding" (code: METU) was constructed, pilot-tested, and the identical form of the test was administered both pre and post for the treatment and control groups. The Kuder-Richardson formula #20 test of reliability produced an index of .835 for the METU, while the K-R formula #21 index was .806. In addition, the instrument was given a high validity rating by specialists in the fields of manpower and education.

A 62-item agree-disagree "Survey of Manpower & Economic Attitudes" (code: SOMEA) was constructed to detect opinions and attitudes regarding problems, issues, institutions, and other matters within the broad area of economics and manpower, and to measure attitude changes associated with exposure to the experimental course. The identical form of the survey was administered to instructional and control groups on both a pre and post basis. Reliability and validity of this instrument have not been tested by standardized criteria or procedures.

A three-page questionnaire ("Summing Up: The Student Talks Back") to measure student attitudes toward the experimental program itself was designed for post-instruction administration. In addition, a questionnaire ("Evaluation of MD/OAEL Course") was constructed for teachers, counselors, and other school personnel to complete at the conclusion of the course.

Behavior changes are potentially observable in both the short run, and long run. A "Pupil Personnel Information Form" was designed to record information concerning the biography, school record, family income, parents' education and occupation, and performance of the "Manpower Economics Test of Understanding" -- all of which will be useful in future efforts to measure the long-run effects of the program. Some short-run behavior changes (e.g., increased interest in school work, improved attendance) were recorded by teachers, guidance counselors, and other school personnel by means of personal interviews and the end-of-course questionnaire.

5. FIELD-TESTING OF EXPERIMENTAL COURSE AND EVALUATION INSTRUMENTS. The course was field-tested in eight schools in three Ohio school systems (see Procedures, above) during the fall semester of the 1967-68 school year. The evaluation instruments described above were field-tested concomitantly. Excellent cooperation was received from the teachers, counselors, and administrators in the participating school systems.

6. ANALYSIS OF RESULTS. In addition to establishing that it is possible to accomplish the specific objectives listed above (and #7, described below), the principal findings from the field-testing are as follows:

a) Students in the eighth-grade instructional group increased their scores on the 40-item METU from a pre-instruction mean of 14.9 (N=605) to a post-instruction mean of 20.8 (N=576)

for a gain of 39.6 percent, while eighth graders in the control group (who were not exposed to the MD/OAEL course) increased their mean score from 14.4 (N=551) to 15.3 (N=527) for a gain of 6.2 percent. The eighth graders enrolled in the experimental MD/OAEL course therefore increased their test score by 33.4 percent more than the control group. Differences in post-test scores between instructional and control groups were significant at the .01 level, and differences in gain scores between the instructional and control groups also were significant at the .01 level. On pre-test scores, there were no significant differences between the instructional and control groups. We conclude that the eighth-grade students who took the course significantly increased their manpower and economic understanding. (Results for the ninth and tenth graders were less significant because the populations were much smaller and controls were inadequate.)

b) Between the beginning of the course (pre-test) and the end of the course (post-test), the eighth-grade students in the instructional group (post-test N=564) changed the opinions they expressed on 21 attitude questions out of 62 possible (34%), as indicated by either a shift in the nature of the composite modal responses (e.g., from "agree" to "disagree", or vice versa; or from "undecided" to "agree" or "disagree", or vice versa); or a change of 10 percentage points or more in the frequency with which the given modal response was selected. Students in the control group changed attitudes on 11 items (18%), and on the post-test were undecided on 10 items compared to only one item for the instructional group. We infer, therefore, that the experimental course did induce changes in student attitudes toward manpower and economic issues.

c) In their subjective evaluation ("Summing Up"), the eighth graders gave the course an overall rating far above average, they felt it was somewhat above average in interest, they learned a great deal, it was below average in difficulty, and it was extremely valuable to them in terms of their future decisions and actions. (Note: Responses are tabulated in quantitative form in the full report.)

d) Teachers, guidance counselors, and school administrators reported some short-run behavior changes in students enrolled in the experimental course, including more interest shown in school and a dropout rate much lower than anticipated for the select group of 55 tenth graders. Information on students in both the instructional and control groups has been compiled that will be useful in studying long-run behavior relative to subsequent education, training, and labor force participation.

7. DISSEMINATION. In order to permit prompt and widespread dissemination of the instructional materials, authorization was received from the Office of Education to publish a revised experimental edition of the course (title: Manpower & Economic Education: Opportunities in American Economic Life) and a separate Teacher Manual. The two documents were published by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832, and released for national distribution early in May. The Joint Council on Economic Education assumed responsibility for distributing the materials, charging prices that will cover full costs of printing and handling and dissemination activities. A first printing of 5,000 copies was ordered by the Joint Council to meet anticipated demands for examination copies and adoptions for experimental use, subject to controls established by the Ohio University Center For Economic Education, pending approval of the Final Report by the U. S. Office of Education.

Additional dissemination activities undertaken by the project staff include participation in professional meetings and conferences (American Vocational Association, Ohio Council for the Social Studies, NDEA Directors Institute in Economic Education, NDEA Experienced Teacher Fellowship Program, State of Arkansas Department of Education Curriculum Conference, et al.); reports on project findings and availability of instructional materials in public and professional media (Newsletter of the Joint Council on Economic Education, State of Ohio Department of Education Monthly Newsletter, Appalachia Educational Laboratory magazine "Appalachian Advance", Columbus Dispatch); and notices sent to approximately 200 individuals and professional organizations interested in manpower education.

CONCLUDING COMMENTS. A number of unanticipated problems -- administrative and fiscal -- placed the project in serious jeopardy at various times. During the first year and most of the second, the College of Business Administration was unable to provide suitable office space, equipment, facilities, and administrative support. In order to compensate for these shortcomings, the principal investigator and associate investigator found it necessary to forego holidays and vacation time and work evenings, every Saturday, and numerous Sundays in order to carry out the project. During the second year, this situation was further aggravated by a 29 per cent reduction in federal funds from the original budget plan, which eliminated the entire budget for consultants, student assistants, and computer services.

Emergency help was received from the College of Business in the form of one part-time graduate assistant, along with a limited amount of clerical help from the Department of Economics. A continuing serious of personnel and administrative changes and disruptions in the university contributed further to our problems. Without doubt, successful completion of the project was possible only because of the extraordinary dedication and effectiveness of the associate investigator (Phillip E. Powell) and project secretary (Mrs. Vicki Williams).

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## 1. THE PROBLEM

"As Americans, the challenge of youth unemployment confronts us all. . . . Without immediate, bold, and imaginative action, these young people today and a much larger proportion tomorrow will be foredoomed to failure and frustration."

--President's Committee on Youth Unemployment (1963)

Problems of unemployment, underemployment, and changing manpower requirements, especially as they affect young people, have attracted increasing attention in recent years. During the 10-year period 1958-1967, the unemployment rate for young workers (age 16-24) has been double the rate for all workers. For workers 18 and 19 years of age, unemployment during the past decade has averaged 13.9 per cent, or one worker out of every seven. Moreover, unemployment rates for negro workers have been twice as high as for white workers in almost all age and sex categories.

As a nation confronted by the challenges of rapid technological change and a domestic revolution of rising expectations among culturally and economically deprived Americans, we are beginning to show deep concern about the preparation of young men and women for full and effective participation in our economic life. The President's annual Manpower Report continues to emphasize the need to upgrade education and training so that young people can make a smoother transition from school to work.

The central question is: Will the 26 million young men and women who enter the labor force during the 1960's -- and the additional millions in the following decades -- find productive employment; and will they be able to keep pace with the constantly changing manpower demands of our dynamic economy.

The answer depends to a great extent on education. Our economy increasingly is a skill economy, based on highly trained and adaptable manpower. Employment opportunities for the uneducated and unskilled and severely limited. Today, unlike the situation a generation or two ago, the only way to qualify for a good job is to accumulate "human capital" through education and training.

A comprehensive review of educational and manpower literature, along with our experience in organizing and conducting a statewide Manpower Development Institute for Educators (Columbus, Ohio, May 1-2, 1964), strongly suggests that the school curriculum needs to be adjusted to meet the new demands of our evolving Human Resource Economy. An imaginative integration of basic education, economic education, and occupational education holds promise for enhancing student understanding of his or her future role as a responsible member of our economic society and also for motivating young people to plan wisely and prepare purposefully for the future. This pre-employment education and training is especially important in the case of disadvantaged youth, for whom the future can bring vastly expanded personal opportunity to those who acquire the necessary skills, or increasingly difficult problems of adjustment and survival for those untrained and unprepared.

In brief, leading Americans and authorities in both education and manpower agree that young people are not being adequately prepared for the transition from school to work. That is the basic problem that motivated our experimental project.

## 2. PURPOSES AND OBJECTIVES OF THE PROJECT

"Education must provide, as a basic part of its human development responsibility, the preparation needed for effective participation in our economic life. . . . We must bridge the gap between education and work."

-- Manpower Report of the President (1964, 1967)

If young people currently are not being adequately prepared for the changing world of work, what steps might be taken to improve the situation? One course of action would be to include an effective program of economic and manpower education in the school curriculum. The need for such a program has been felt and expressed increasingly by educators and manpower specialists during the past five years.

It is clear that the vast majority of students presently receive little or no formal instruction concerning the role that workers, or human resources play in the economic process. Despite the fact that one-third of our adult life (excluding sleep) is spent at work, the schools have largely ignored the socio-economic institution of work as a subject for curriculum offerings. Preparation for work primarily has been regarded as the responsibility of vocational educators and vocational guidance counselors, whose influence is limited to a small minority of students and whose approach is primarily oriented to developing job skills and choosing an occupation. While these are highly important concerns, and will become even more important in the future, the approach is too narrow and limited to provide adequate understanding of the changing world of work and development of basic skills, attitudes, and behavior patterns necessary to assure successful participation in our economic life. In short, the schools fail to provide functional economic literacy in this crucial area of man's life.

The purpose of our experimental project is to provide an instructional program -- student and teacher materials -- that schools can use to help improve the preparation of young people for effective participation in the changing economy and world of work. In the now familiar

language of the 1967 "Manpower Report of the President", our objective is to help "bridge the gap between education and work" -- by providing the schools with instructional materials, evaluation instruments, and a realistic, classroom-tested educational program for manpower and economic education.

Our assumption is that young people will be better prepared for successful participation in the labor force by developing understandings about the nature and operation of our economic system, the role of work, changing technology and occupational opportunities, decisionmaking procedures, the economic value of education, and labor market processes. Their understanding of work and the role that work plays in the lives of men and women will also be improved by self-examination of their own attitudes, values, goals, and behavior relative to career planning, occupational success, economic life, social roles, individual development, and self-fulfillment. An educational program of this type can meet an important need for male and female students of all socio-economic groups, and especially for disadvantaged youth whose knowledge of occupational opportunities and labor market processes may otherwise be quite limited or distorted.

A major hypothesis of the experiment is that economic and manpower education will indeed "make a difference" with respect to the understanding, attitudes, and behavior of young people exposed to the instructional treatment.

Specific objectives of the project are to:

1 -- Identify the appropriate content for a junior or senior high school course aimed at bridging the gap between school and work;

2 -- Determine the feasibility of introducing a separate course in manpower and economic education into the school curriculum, and at what grade level and under what teacher-subject aegis;

3 -- Write a set of instructional materials or self-contained course ("Manpower Development: Opportunities in American Economic Life") incorporating the appropriate information and concepts in a form suitable for experimental use in the schools,

4 -- Develop valid and reliable evaluation instruments and procedures to test the pre-treatment and post-treatment understanding, attitudes, and behavior of students with respect to manpower and economic concerns;

5 -- Field-test the instructional materials and evaluation procedures in a number of schools;

6 -- Analyze the results of field-testing;

7 -- Disseminate the experimental findings and the instructional and evaluation materials to the educational community at large in order to encourage additional experimentation, use, and improvement of the program.

Proceeding from the assumption that some type of manpower/economic education may have an important role to play in the preparation of young people for the changing world of work, our objective has been to develop a relevant course of instruction, test its practicability and effectiveness in the classroom, and make it available to the educational community with a minimum of delay.

## 3. PROCEDURES: FUNDING, PERSONNEL, DESIGN, AND STRATEGY OF THE PROJECT

"Research and development is one-tenth inspiration and nine-tenths perspiration."

A brief chronology of procedures is provided above on pages ii-iii of the "SUMMARY OF PROJECT" and will not be repeated here. In this chapter, a functional description of procedures will be presented, more or less in logical sequence.

Proposal, Grant Awards, and Time Schedule. The original proposal was transmitted to the U. S. Commissioner of Education on March 1, 1965, with a request for $134,140 of federal funds, under provisions of Section 4 (c) of the Vocational Education Act of 1963. Beginning date was to be September 1, 1965, and ending date November 30, 1967. This proposal was provisionally approved in a letter dated January 3, 1966, from the Director of the Division of Adult and Vocational Research.

On August 12, 1965, a revised proposal was transmitted to the Commissioner of Education, requesting $98,970 of federal funds (with an additional $21,990 of Ohio University funds) for a 24-month project to begin February 1, 1966, and end January 31, 1968. Supplementary information was submitted by the principal investigator in a memorandum dated March 8, 1966, including a revision of the proposed time schedule. On June 24, 1966, a notification of grant award in the amount of $60,970 of federal funds was received for the period June 22, 1966 through June 30, 1967. The grant was described in the notification as "the first stage of a proposed two (2) year program and it is the intention of the Office of Education to extend the period of this Grant for one (1) additional year to complete the project, subject to satisfactory performance and subject to the availability of appropriations for the program".

The amount of federal funds requested for the second year continuation, originally budgeted in the amount of $38,000, was reduced to $27,000 (budget application dated August 16, 1967, with Ohio University applicant funds in the amount of $5,650) at the request of the Office

of Education because of cutbacks in research appropriations. This amount was awarded in a notification dated September 7, 1967, to cover an amended time period from July 1, 1966, through August 31, 1967.)*

Project Personnel. A number of university and outside experts in the fields of education and manpower were consulted during the preparation of the proposal. Upon notification of the grant award, a full-time associate investigator was appointed (a social studies educator with five years of secondary school teaching experience) as well as a full-time secretary. Along with the principal investigator (an economist with 11 years of university teaching experience and five years of experience in economic education), this constituted the core of the project staff. One additional economist served on the staff on a half-time basis for one semester, and a junior high school guidance counselor served as a part-time member of the staff for the equivalent of one semester.

Six graduate student assistants were assigned to the project at various times, for periods ranging from two weeks to a full calendar year (peak of three during one semester). A total of nine consultants, including four members of the Ohio University faculty, contributed to the project. Several university undergraduates and high school students were employed on an hourly basis for clerical duties.

Numerous professional personnel from the Lancaster, Zanesville, and Columbus, Ohio, school systems cooperated in the project, including three project coordinators, eight teachers, and two additional guidance counselors who were directly involved in field-testing and evaluation.

A list of all (except clerical) personnel who participated in the experimental project is provided in Appendix X.

Content Research and Organization of Information. The first specific objective of the project (see chapter 2, above) was to identify the content that would be appropriate for a high school course in manpower and economic education. This involved numerous conferences and a search and review of the literature in vocational education, junior and senior high school curriculum, economic education, vocational guidance, occupations, manpower, human resources, technological change, decisionmaking, and the psychological and sociological aspects of work.

An indication of staff thinking at this stage of the project is given in the "Transcribed Notes of a Planning Conference Held by the Professional Staff of the Manpower Project, September 9-10, 1966", which is reproduced in Appendix VIII.

A detailed classification system was set up (see "CLASSIFICATION SYSTEM FOR INFORMATION AND DATA" in Appendix VIII) based primarily on the major themes tentatively selected for inclusion in the course.

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* On June 25, 1968, the principal investigator received notification of a $3,000 increase in grant no. OEG-3-6-051203-2080, from USOE dated June 14, 1968, as requested in a letter to the project officer dated May 3, 1968.

Card files were indexed by author and cross-indexed by subject matter, keyed to the classification system. A supplementary file of annotations (on 5x8 cards) and publications was arranged alphabetically by author. The latter included a vertical file of pamphlets and other brief publications along with a shelf file of books, government documents, etc. Approximately 1200 articles, books, documents, and other publications were reviewed and indexed by the project staff. These card files and annotations served as principal sources and references for writing technical background papers, such as the 27-page technical paper, "Psychological Dimensions of Work", reproduced by mimeograph, July 1967, and distributed to teachers of the experimental classes.

Format and Thematic Allocation of Lessons. In April, 1967, guidelines were drafted for preparing student and teacher materials for the new course, to be designated "Manpower Development/Opportunities in American Economic Life" (code: MD/OAEL). A format was adopted for writing the instructional materials and a tentative allocation was made for each of the major themes:

| | |
|---|---|
| Analysis, Choice, and Decisionmaking | 6-9 lessons |
| The World of Economics | 10-14 " |
| The World of Work | 7-10 " |
| Labor Market Structure and Processes | 22-30 " |
| Psychology of Work | 8-10 " |
| Sociology of Work | 10-14 " |
| Education and Its Economic Value | 10-14 " |

Staff memoranda outlining procedures for writing the daily lessons ("Procedures for Preparation of Student Materials, MD/OAEL", April 7, 1967) and for teacher supplementary materials ("Procedures for Preparing MD/OAEL Supplementary Materials and Suggestions for Teachers", April 19, 1967) are reproduced in Appendix VIII. The lessons, 75 in total, were all written by the principal investigator and associate investigator, with the former assuming full responsibility for editing the entire number. Drafts of several of the psychological and sociological lessons were prepared by the project's part-time vocational guidance consultant.

The lessons were mimeographed, collated, stapled, and packed for delivery to the participating schools. Deliveries were usually made by a member of the project staff in conjunction with classroom visitations. Inadequate office space, equipment, and clerical help created serious problems in producing the 1,000 copies of each lesson required for project use. In order to overcome these production problems, it was necessary for the project investigators to work many additional hours. (See Appendix I for complete text of the experimental MD/OAEL course in its revised form.)

Selection of Schools and Student Populations for Experimental Testing. Six criteria were used in selecting the school systems to participate in field-testing the experimental MD/OAEL course:

1) population (in the range 25,000-100,000; there are 36 cities in this range in Ohio and 700 in the U.S.);

2) educational leadership (professional capability and interest on the part of the superintendent of schools and his staff);

3) educational program (flexibility of curriculum structure, effective guidance program, demonstrated interest and prior involvement in programs aimed at improving vocational and economic education);

4) community environment (general support and interest from community leaders, including the school board),

5) socio-economic characteristics (balanced economic and social structure, including some low-income and disadvantaged students);

6) location (physical proximity to the Athens campus of Ohio University, to facilitate travel and communication).

After preliminary discussions with a number of school systems in central and southeastern Ohio, Lancaster and Zanesville were selected for the basic experiment with eighth-grade students, and Columbus was selected for a "side experiment" with a smaller group of ninth graders. Subsequently, a special group of potential dropouts at the tenth-grade level in Lancaster High School was added as another side experiment.

The city of Lancaster, a commercial and industrial center (the largest city in southeastern Ohio) had a 1960 population of 29,916 and a 1967-68 high school student population (junior plus senior high) of 3,603. Lancaster is located 50 miles northwest of Athens.

The city of Zanesville, also the commercial-industrial center for a predominantly rural area, had a 1960 population of 39,077 and a 1967-68 high school student population (junior plus senior high) of 3,375. It is located 60 miles north of Athens, and is included within Appalachia, as defined by the Appalachian Regional Commission.

The city of Columbus had a 1960 population of 471,316 and a 1967-1968 high school student population of 42,706. It is the capital of Ohio and is located 75 miles northwest of Athens.

In designing the procedure for the experimental instruction, pre and post-testing, and orientation of teachers and other school personnel, by far the most serious problem encountered was in scheduling. Whereas our intent was to design and field-test the course at the eighth or seventh grade level -- because this was identified by our guidance consultants as an especially crucial period in a student's psychological development, identity and aspiration formulation, and educational and career planning -- the greatest flexibility in the curriculum appeared to be at the ninth grade level.

Zanesville agreed to offer the experimental MD/OAEL course at the eighth-grade level as an additional required class, above the normal student load, with little or no out-of-class study required (an arrangement that was encouraged by the project staff). Half of the eighth-grade students were enrolled in the fall semester (N=290) with the other half (matched by ability, based on the Otis Test of Mental Ability) serving as the control group. (The latter group then took the course during the spring, but this instruction was not included as part of the project experiment.)

In Lancaster, the instructional group (N=330) took the experimental course on a required basis, in place of the first semester of the eighth-grade U.S. History course. The control group (matched by pairs with the instructional group based on the Otis Test of Mental Ability) was enrolled in the regular U.S. History course for two full semesters. In other words, while the instructional group was taking the new experimental MD/OAEL course in the fall, the control group was taking (in some cases from the same teacher) the first semester of U.S. History. In the spring semester, the fall experimental group took an abbreviated U.S. History course, covering selected material from the normal year-long course during the time available in the one remaining semester. No eighth-grade students were enrolled in the experimental MD/OAEL course in Lancaster during the spring semester.

The "side experiment" at the tenth-grade level in Lancaster involved 55 students (38 male and 17 female) identified by the guidance staff as "potential dropouts". This group had a mean score of 92 on the Otis Mental Ability Test (Beta Form), and the students were characterized as having poor academic records, poor school attendance, weak motivation, family problems, and in general being disadvantaged (although all but four came from families with incomes above $4,000). Under a special program designed by the Lancaster Schools and carried out under a Title I grant (Elementary and Secondary Education Act), the students were provided with small-group and individual guidance during the 1967-68 school year. The experimental MD/OAEL course provided the core of the special program for these students (six classes averaging nine students, all taught by the same instructor). The balance of their instruction and class schedule was the conventional Lancaster Senior High School program.

An attempt was made to establish a control group corresponding to the Lancaster tenth graders by identifying a similar group of potential dropouts in the tenth grade at Zanesville High School, but the results were unsatisfactory. Among other reasons, only 15 students in the original control population of 36 took both the pre and post-tests of understanding.

An additional side experiment was arranged, at the ninth-grade level, involving the Columbus schools. One junior high school was used for the instructional treatment and a different school (located nearby, with students of similar socio-economic characteristics and mental ability) for control purposes. The instructional group consisted of 92 ninth-grade students (26 male and 66 female), with a mean score of 102 on the Henmon-Nelson Test of Mental Ability enrolled in the General Business course. All students in the instructional group (three classes) were taught by the same teacher.

The control group consisted of 76 ninth-grade students (32 male and 44 female, with a mean score of 96 on the Henmon-Nelson Test) who were enrolled in the General Business course at the other junior high school.

Teacher Characteristics and Orientation. The project investigators did not prescribe any special qualifications for the teachers who were to participate in field-testing the experimental course. Staffing was left entirely to the respective school systems. We did, however, strongly encourage that all of the teachers submit applications for participation in the National Defense Education Act Summer Institute in Economics conducted at Ohio University June 19-July 28, 1967.

The principal investigator had assisted in initiating the Institute proposal and designing the instructional program, which emphasized basic economics and manpower development. Social studies teachers and guidance counselors from Ohio, West Virginia, and the Appalachian counties of Kentucky and Pennsylvania were invited to apply. This group included teachers from Zanesville, Lancaster, and Columbus; and seven of the eight teachers from the experimental schools, plus three guidance counselors, did participate in the six-week Institute.

All eight of the teachers involved in field-testing were male. Only one was over 30 years of age. Excluding the one older teacher (with 16 years of experience and a Master's degree) -- who did not attend the NDEA Institute -- they averaged three years of teaching experience. Prior to the Institute, the eight teachers altogether had an average of one year of college economics; and none had majored or minored in economics. Three had attended the equivalent of a three-semester-hour workshop in economic education. None of the teachers had taken a college course in labor, manpower, human resources, or vocational guidance.

During the six-week institute, the project investigators met three times with the 10 teachers and guidance counselors enrolled in the program who were assigned to the experimental project to begin orienting them. Then, on August 25-26, a special "Pre-School Conference" was conducted in Athens to provide the teachers, guidance counselors, and school coordinators with a thorough briefing on procedures for administering pre-tests during the first week of school in September and beginning the experimental teaching immediately afterwards. With the exception of one teacher, all of the school personnel directly involved in the project were present at this conference (i.e., all three school coordinators, the two additional guidance counselors, and seven of the eight experimental teachers). The agenda included a presentation by the project investigators reviewing the purposes and procedures of the project; visual illustrations of major themes in the one-semester MD/OAEL course; evaluation procedures at the beginning and end of the semester; staff services to be provided by the project investigators during the f[illegible] semester; and miscellaneous activities. Abundant time was devoted to discussion of questions raised by the teachers and other school personnel.

In order to give the teachers a feeling of confidence and deeper understanding with respect to the basic themes in the course, half a day was devoted during the conference to examining, item by item, the publications listed in "A Basic Manpower Economics Library" (see pp. 129-134 in Appendix II of this Report, which is the Teacher Manual for Manpower & Economic Education). Each teacher was provided with a complete set of the 26 books, government documents, pamphlets, and other items and a demonstration of how to make effective use of the materials for background reading and reference purposes. In the Teacher Supplementary Materials, specific page and chapter references were made to publications included in this Basic Library.

During the period of experimental instruction (i.e., the fall semester, 1967-68) each classroom was visited three or more times by the investigators, at the invitation of the respective teachers. A total of five mimeographed "Project Newsletters" were sent to the school personnel to help keep everyone informed during the semester, plus three additional letters in the ensuing months. These were supplemented with telephone conversations and personal correspondence.

On Saturday, November 4, 1967, a "Mid-Semester Conference" was held in Columbus, Ohio, with 12 of the 13 school people attending. The primary purpose of this meeting was to give everyone an opportunity to report on his project involvement to date, raise questions about instructional problems and experiences, clarify evaluation procedures (including completion of a "Pupil Personnel Information Form" for each student included in the treatment and control groups), and generally to assure that everyone in the project was thoroughly oriented at the half-way point in the semester. Apart from a few specific problems that were identified, such as student difficulties with vocabulary and statistical data, the project appeared to be going smoothly; and teacher morale and enthusiasm were high.

Evaluation Instruments and Procedures. A major purpose of the project was to test the hypothesis that manpower and economic education really "make a difference" with respect to understanding, attitudes, and behavior. In other words, to determine whether exposure to the instructional treatment would have significant effects on the understanding, attitudes, and behavior of the students as revealed in measured differences between the treatment group and a control group consisting of similar students who are not exposed to the instructional program.

Two major testing instruments, along with three questionnaires, were constructed for the purpose of measuring the above variables and are described below.

1) "Manpower Economics Test of Understanding" (code: METU). This is a 40-item multiple choice test designed to measure student understanding of concepts, relationships, and facts related to manpower, work, and the economic process. The test is reproduced in Appendix III, along with a copy of IBM 1230 answer sheet, document no. 511, which was used for scoring. METU is not designed to record attitudes or value judgments, but

merely to test understanding. It was constructed by the project staff and pilot-tested during the summer of 1967 with seventh-grade students in Logan, Ohio. There is only one form of the test, and it was designed for use both pre-and post-instruction. The index of reliability using the Kuder-Richardson formula #20 is .835; and using the K-R formula #21 it is .806. The test was judged to be valid by the project consultants and staff. Arrangements were carefully made to assure that none of the teachers involved in field-testing the experimental course had access to the test until after the fall semester ended. The authors of the instructional material conscientiously avoided giving any special emphasis to information related to particular items included in the test.

2) "Survey of Manpower & Economic Attitudes" (code: SOMEA). This is a 62-item instrument aimed at detecting opinions and attitudes regarding a variety of concerns in the broad area of economics and manpower (i.e., conditions, problems, issues, institutions, policies) and more importantly, changes in these attitudes and opinions that occurred during the semester when the experimental course was taught. Students were permitted to select one of five possible responses -- "Strongly Agree," "Agree," "Undecided," "Disagree," "Strongly Disagree" -- to each of the 62 declarative statements listed. The survey instrument is reproduced in Appendix IV, along with a copy of the IBM answer sheet that was used. There is only one form of the instrument, designed to use both pre and post. The project consultants and staff judged the instrument to be relevant and valid, but no formal statistical test of reliability was made.

3) "Pupil Personnel Information Form" (code: PPIF). This is a two-page, mimeographed form (see Appendix V) for recording information concerning the biography, school record, parents' education and occupation, family income, and performance on the "Manpower Economics Test of Understanding" for all instructional and control students involved in the experiment. It was designed to be filled out by teachers or guidance counselors, not by students themselves, during the semester when the experimental course was taught. The information on the form can be used in future efforts to determine the long-run effects of the experimental program in terms of high school and college performance, curriculum choice, and labor force success.

4) "Summing Up: The Student Talks Back". A three-page questionnaire (see Appendix V) designed for students to fill out at the end of the instructional period (i.e., end of the one-semester course). Its purpose is to provide students with an opportunity to express their reaction to the course and to reveal their personal evaluation and response to particular aspects of the course and to the overall course.

5) "Evaluation of MD/OAEL Course." A four-page questionnaire consisting of eight open-ended questions, for teachers, counselors, and other school personnel to complete at the end of the experimental program (see Appendix V).

During the semester, interviews were conducted with school personnel and small groups of students for the purpose of obtaining additional information relevant to evaluating the program, including indications of short-run behavior changes (student morale, interest in school work, class participation, attendance, contacts with guidance counselors, dropouts, behavior, etc.). A two-page form, "MD/OAEL Visitation Record" (see Appendix V) was developed to help seek out useful information.

## 4. EVALUATION OF THE PROJECT

> "If their work is to contribute to society's store of significant and relevant knowledge, economic educators must perform three fundamental research tasks: careful design of controlled experiments, formal evaluation of outcomes, and publications of findings."

The experimental MD/OAEL course was field-tested in eight schools in central and southeastern Ohio (see pp. 8-11 above) during the fall semester of the 1967-68 school year. A total of 620 eighth-grade students were enrolled in the experimental course on an assigned (not elective) basis in six junior high schools in Lancaster and Zanesville (each system has three junior high schools, grades 7-9). A total of 551 eighth graders in the six schools (i.e., the balance of the eighth-grade class) served for control purposes. All of the instructional and control students (except those who were absent on test days) took a pre-test of understanding and a pre-test survey of attitudes the first week of school, before any instruction was given. At the end of the semester, they were given the identical tests again. (The same procedures were followed for the ninth and tenth graders involved in the experiment, but results on these two groups will be reported only in part. The investigators believe that the ninth and tenth grade findings are interesting and suggestive but the size of the student populations and degrees of freedom were not sufficient to yield statistically significant results.)

The differential effect of the new instructional program (i.e., the experimental MD/OAEL course) versus the regular practice was measured by use of treatments-by-replication design in which the six junior high schools are the replications and groups of students, matched by mental ability, are the sampling units. All instruction within each school was done by one teacher. Table 4-1 summarizes the METU test results, pre and post, for the treatment and the control groups. The treatment consisted of enrollment in the one-semester experimental MD/OAEL course. The control groups differed from the treatment groups in that the control students did not get the experimental course. In the case of the three Zanesville schools, the MD/OAEL course was taken as an extra course; and the control students received no additional instruction. In the case of the three Lancaster schools, the control students were enrolled in the first semester of U.S. History. (Lancaster students in the MD/OAEL course were scheduled to take U.S. History the second semester, covering selected material from the normal two-semester course).

Tables 4-2, 4-3, and 4-4 summarize the test results -- pre, post, and gain scores -- and t-values obtained for the instructional and control groups. Statistical procedures used are described in Paul A. Games and George R. Klare, Elementary Statistics (Data Analysis for Behaviorial Sciences), New York: McGraw-Hill, 1967, pp. 324-329. We used t-values for a two-tail distribution.

Table 4-1. EVALUATION OF STUDENT UNDERSTANDING IN EXPERIMENTAL MD/OAEL COURSE [1]

| TEST GROUP [2] | MEAN SCORE PRE-TEST [3] | N= | MEAN SCORE POST-TEST [3] | N= | PERCENTAGE CHANGE [4] | NET PERCENTAGE CHANGE [5] | STANDARD DEVIATION [6] Pre-test | Post-test |
|---|---|---|---|---|---|---|---|---|
| 8th Grade Instructional | 14.9 | 605 | 20.8 | 576 | +39.6% | +33.4% | 4.78 | 6.83 |
| 8th Grade Control [7] | 14.4 | 551 | 15.3 | 527 | + 6.2% | ---- | 4.58 | 4.79 |
| 9th Grade Instructional | 16.0 | 90 | 18.8 | 80 | +17.5% | + .8% | 3.84 | 6.34 |
| 9th Grade Control | 14.4 | 75 | 16.8 | 72 | +16.7% | ---- | 4.06 | 4.51 |
| 10th Grade Instructional | 12.5 | 54 | 16.8 | 42 | +34.4% | +17.9% [8] | 3.66 | 4.40 |
| 10th Grade Control | 12.7 | 36 | 14.8 | 26 | +16.5% | ---- | 3.65 | 4.64 |

[1] Based on scores made on 40-item multiple-choice MANPOWER ECONOMICS: TEST OF UNDERSTANDING.

[2] For details on the 8th grade students, by schools and school systems, see pp. 17-18.

[3] Possible score: 40 points (i.e., 1 point for each correct answer). Same test form used for pre- and post-testing.

-- footnotes continued on next page

Table 4-1. EVALUATION OF STUDENT UNDERSTANDING IN EXPERIMENTAL MD/OAEL COURSE (--footnotes continued)

[4]Post-test score minus pre-test score divided by pre-test score, i.e., improvement as a percentage of pre-test score.

[5]Improvement of instructional group minus improvement of corresponding control group; can be considered "Net Improvement Factor".

[6]A measure of the dispersion or variance of the scores on the tests. The smaller the standard deviation the closer the scores are grouped around the mean. On post-tests, the standard deviation would normally be greater because of differences in the amount that particular students have learned during the instructional period. The range of post-test scores for the eighth grade instructional group (N=576) was a low score of 3 to a high score of 38 (out of a possible 40).

[7]In order to evaluate the effect of the experimental course, matching control groups were established for each instructional group, and pre-tests and post-tests were administered to all groups. In the six schools having eighth graders enrolled in the course, the procedure was as follows: Students in each school were ranked according to scores made on a test of mental ability, and then paired; approximately half of the students were randomly assigned to the instructional group and the other half assigned to the control group. Control students in Lancaster, Ohio, took one semester of ante-bellum American history, while the instructional students were enrolled in the experimental MD/OAEL course. In Zanesville, Ohio, the instructional students took the experimental course as an extra course, while control students had no additional instruction. The ninth grade instructional group consisted of General Business classes in Clinton Junior High in Columbus, Ohio. These students were matched with a control group of General Business students from Medina Junior High (located in the same section of the city). School officials in Columbus considered the Medina students to be very similar in mental ability and socio-economic background to the Clinton students. The Lancaster tenth grade students enrolled in the course were identified by the school staff as "potential dropouts". The students in this instructional group were chosen on the basis of their academic achievement, school attendance, and revealed attitudes. The tenth grade control group corresponding to the Lancaster instructional group was selected from Zanesville (Ohio) High School (students identified by the school's vocational guidance counselor as potential dropouts).

[8]Because the number of 10th graders actually taking both the pre- and post-tests was so small, these results must be interpreted with caution. Mean scores for instructional and control groups, including only those students who took both the pre- and post-tests, would be significantly different from scores reported in the table. Based on this much smaller sample (instructional group, N=41; control group, N=15), the "Net Percentage Change" for the 10th grade instructional group would be 33.0%.

*The Kuder-Richardson test of reliability was applied to the post-test scores on the MANPOWER ECONOMICS TEST OF UNDERSTANDING for all eighth grade instructional groups. The K-R formula No. 20 produced an index of .835 and the K-R formula No. 21 gave an index of .806. (Specialists in testing of measurement consider that an index of .80 and above reveals a highly reliable examination.)

Table4-1. EVALUATION OF STUDENT UNDERSTANDING IN EXPERIMENTAL MD/OAEL COURSE
(Detail by Schools, Instructional Group)

| INSTRUCTIONAL GROUP | MEAN SCORE PRE-TEST | N= | MEAN SCORE POST-TEST | N= | PERCENTAGE CHANGE | NET PERCENTAGE CHANGE | STANDARD DEVIATION | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Pre-test | Post-test |
| Ewing Jr. High School Lancaster, Ohio | 16.6 | 112 | 22.9 | 107 | +38.0% | +28.7% | 5.54 | 6.75 |
| Sherman Jr. High School Lancaster, Ohio | 14.3 | 86 | 25.2 | 85 | +76.2% | +71.3% | 4.40 | 6.65 |
| Stanbery Jr. High School Lancaster, Ohio | 14.4 | 126 | 19.5 | 114 | +35.4% | +30.9% | 4.38 | 6.09 |
| Lancaster Junior High Schools (Total of 3) | 15.2 | 324 | 22.3 | 306 | +46.7% | +40.7% | 4.92 | 6.87 |
| Cleveland Jr. High School Zanesville, Ohio | 14.1 | 87 | 20.1 | 84 | +42.6% | +35.3% | 4.74 | 6.47 |
| Hancock Jr. High School Zanesville, Ohio | 13.7 | 84 | 17.2 | 80 | +25.6% | +18.5% | 4.36 | 6.11 |
| Roosevelt Jr. High School Zanesville, Ohio | 15.9 | 110 | 19.7 | 106 | +23.9% | +16.3% | 4.45 | 6.29 |
| Zanesville Junior High Schools (Total of 3) | 14.7 | 281 | 19.1 | 270 | +29.9% | +22.5% | 4.61 | 6.38 |

Table 4-1. EVALUATION OF STUDENT UNDERSTANDING IN EXPERIMENTAL MD/CALL COURSE (continued)
(Detail by Schools, Control Group)

| CONTROL GROUP | MEAN SCORE PRE-TEST | N= | MEAN SCORE POST-TEST | N= | PERCENTAGE CHANGE | STANDARD DEVIATION Pre-test | Post-test |
|---|---|---|---|---|---|---|---|
| Ewing Jr. High School Lancaster, Ohio | 15.1 | 93 | 16.5 | 87 | + 9.3% | 4.76 | 5.06 |
| Sherman Jr. High School Lancaster, Ohio | 14.2 | 117 | 14.9 | 116 | + 4.9% | 4.44 | 4.58 |
| Stanbery Jr. High School Lancaster, Ohio | 15.7 | 100 | 16.4 | 90 | + 4.5% | 4.59 | 4.81 |
| Lancaster Junior High Schools (Total of 3) | 14.9 | 310 | 15.8 | 293 | + 6.0% | 4.62 | 4.84 |
| Cleveland Jr. High School Zanesville, Ohio | 13.7 | 81 | 14.7 | 84 | + 7.3% | 4.23 | 4.60 |
| Hancock Jr. High School Zanesville, Ohio | 12.7 | 81 | 13.6 | 74 | + 7.1% | 4.69 | 4.49 |
| Roosevelt Jr. High School Zanesville, Ohio | 14.5 | 79 | 15.6 | 76 | + 7.6% | 4.19 | 4.78 |
| Zanesville Junior High Schools (Total of 3) | 13.6 | 241 | 14.6 | 234 | + 7.4% | 4.42 | 4.67 |

Table 4-2. ANALYSIS OF POST-TEST MEANS OF EIGHTH-GRADE STUDENTS

| SCHOOL | POST-TEST MEAN SCORES | | DIFFERENCE IN MEAN SCORES (D=X-Y) | $D^2$ |
|---|---|---|---|---|
| | Instr. Group X | Control Group Y | D | |
| (1) Ewing | 22.9 | 16.5 | 6.4 | 40.96 |
| (2) Sherman | 25.2 | 14.9 | 10.3 | 106.09 |
| (3) Stanbery | 19.5 | 16.4 | 3.1 | 9.61 |
| (4) G. Cleveland | 20.1 | 14.7 | 5.4 | 29.16 |
| (5) Hancock | 17.2 | 13.6 | 3.6 | 12.96 |
| (6) T. Roosevelt | 19.7 | 15.5 | 4.2 | 17.64 |
| (7) $\Sigma$ | 124.6 | 91.6 | 33.0 | 216.42 |
| (8) $\bar{X}$ | 20.767 | 15.267 | 5.50 | |

df = n-1 = 5 t obtained = 5.097

t.05 = 2.571

t.01 = 4.032

Finding: Mean scores of the six instructional groups are higher on the post-test of manpower and economic understanding than mean scores of the corresponding control groups; the differences are significant at the .01 level.

Table 4-3. ANALYSIS OF GAIN SCORES OF EIGHTH-GRADE STUDENTS

| SCHOOL | POST-TEST GAIN SCORES* | | DIFFERENCE IN GAIN SCORES (D=X-Y) | |
|---|---|---|---|---|
| | Instr. Group X | Control Group Y | D | $D^2$ |
| (1) Ewing | 6.3 | 1.4 | 4.9 | 24.01 |
| (2) Sherman | 10.9 | .7 | 10.2 | 104.04 |
| (3) Stanbery | 5.1 | .7 | 4.4 | 19.36 |
| (4) G. Cleveland | 6.0 | 1.0 | 5.0 | 25.00 |
| (5) Hancock | 3.5 | .9 | 2.6 | 6.76 |
| (6) T. Roosevelt | 3.8 | 1.0 | 2.8 | 7.84 |
| (7) $\Sigma$ | 35.6 | 5.7 | 29.9 | 187.01 |
| (8) $\bar{X}$ | 5.933 | .95 | 4.983 | |

* Post-test mean scores minus pre-test mean scores.

df = n-1 = 5 t obtained = 4.426

t.05 = 2.571

t.01 = 4.032

Finding: Gain scores of the six instructional groups are higher on the test of manpower and economic understanding than gain scores of the corresponding control groups; the differences are significant at approximately the .01 level.

Table 4-4. ANALYSIS OF PRE-TEST MEANS OF EIGHTH-GRADE STUDENTS

| SCHOOL | PRE-TEST MEAN SCORES | | DIFFERENCE IN MEAN SCORES (D=X-Y) | |
|---|---|---|---|---|
| | Instr. Group X | Control Group Y | D | $D^2$ |
| (1) Ewing | 16.6 | 15.1 | 1.5 | 2.25 |
| (2) Sherman | 14.3 | 14.2 | .1 | .01 |
| (3) Stanbery | 14.4 | 15.7 | -1.3 | 1.69 |
| (4) G. Cleveland | 14.1 | 13.7 | .4 | .16 |
| (5) Hancock | 13.7 | 12.7 | 1.0 | 1.00 |
| (6) T. Roosevelt | 15.7 | 14.5 | 1.4 | 1.96 |
| (7) $\Sigma$ | 89.0 | 85.9 | 3.1 | 7.07 |
| (8) $\bar{X}$ | 14.83 | 14.316 | .5167 | |

df = n-1 = 5 t obtained = 1.210

t.05 = 2.571

t.01 = 4.032

Finding: Mean scores of the six instructional groups are not significantly higher on the pre-test of manpower and economic understanding than mean scores of the corresponding control groups.

In summary, the tabulations and statistical procedures reported above (i.e., improvement in mean scores, standard deviations, and t-tests) were used to determine whether the differences in mean scores between instructional and control groups did in fact reflect differences in level of understanding (as indicated by the test instrument) rather than simply being the result of chance. The t-test analysis demonstrated that there were no significant differences between the instructional and control groups on the pre-test, but there were significant differences at the .01 level in the post-test means and the gain scores of the two groups. The eighth-grade students in the instructional group as a whole showed a net improvement of 33.4%. Gains in mean scores, by school, ranged from a high of 76.2% to a low of 23.9% for the eighth graders.

The above findings demonstrated that the experimental MD/OAEL did indeed make a difference in terms of student understandings as measured by performance on the "Manpower Economics Test of Understanding". These findings tend to be further reinforced by subjective evidence in the form of opinions expressed by students and school staff. In Part D of "Summing Up: The Student Talks Back" (see Appendix VI-1), the eighth-grade students (as well as the ninth and tenth graders) gave the course a high rating in terms of the amount they felt they learned and also the value of the course for their own future decisions and actions. Fifty-three per cent of the students indicated that the course was "above average" or "outstanding" when compared with other courses on the basis of what was learned, while only 15% indicated that it was "below average" or "poor". With respect to the value of the course, 67% rated it "above average" or "outstanding", while 10% rated it "below average" or "poor".

Teachers and other school personnel agreed with the test results and with the students' own appraisal: they were apparently unanimous in their judgment that the students learned a great deal of relevant and practical information from the course. (See responses to Questions #1, #2, and #3 in Appendix VI-2).

The second element of our hypothesis concerned student attitudes. Did the experimental program make a difference with respect to attitudes? Table 4-5 summarizes the responses that the eighth-grade instructional group gave to the "Survey of Manpower & Economic Attitudes", both pre and post, including the modal response to each statement. Between the beginning of the course (pre-test) and the end of the course (post-test), these students changed their opinions on 21 attitude statements out of 62. These changes are indicated by either a shift in the nature of the composite modal responses (e.g., for "agree" to "disagree", or from "undecided" to "agree" or "disagree", or vice versa) or by a change of 10 percentage points or more in the frequency with which the given modal response was selected. This represented a shift of attitudes on 34% of the items.

Table 4-5. "SURVEY OF MANPOWER & ECONOMIC ATTITUDES": SUMMARY OF RESPONSES BY EIGHTH-GRADE STUDENTS[1]

| STATEMENT | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE[2] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | TOTAL | | |
| | | No. | % | No. | % | No. | % | No. | % | No. % | (N) | Answer | % |
| 1. "Workers with more schooling deserve higher wages than workers with less schooling. | Pr | 218 | 37.0% | 209 | 35.4% | 14 | 2.3% | 111 | 18.8% | 37 6.3% | 589= 100% | A* | 72% |
| | Po | 276 | 48.9 | 198 | 35.1 | 13 | 2.3 | 58 | 10.3 | 17 3.0 | 563= 100% | A | 80 |
| 2. "What is good for American workers is good for the American economy. | Pr | 45 | 7.6 | 281 | 47.8 | 147 | 25.0 | 105 | 17.9 | 10 1.7 | 588 | A | 55 |
| | Po | 58 | 10.3 | 284 | 50.4 | 128 | 22.7 | 77 | 13.7 | 16 2.8 | 563 | A | 61 |
| 3. "Labor unions deserve credit for improving the life of the working man. | Pr | 108 | 18.4 | 289 | 49.1 | 80 | 13.6 | 90 | 15.2 | 22 3.7 | 589 | A | 68 |
| | Po | 119 | 21.1 | 297 | 52.8 | 74 | 13.1 | 60 | 10.7 | 13 2.3 | 563 | A | 74 |

1 Distribution of choices among five possible responses made by eighth graders in Lancaster and Zanesville, Ohio, enrolled in experimental MD/OAEL course to a 62-item questionnaire. Pre-test of the "Survey of Manpower & Economic Attitudes" (SOMEA) was given in September before instruction began. Post-testing was done using the identical form of SOMEA upon completion of the course in January. The row designated "Pr" refers to responses given on pre-test. The row designated "Po" refers to responses given on post-test.

2 In this tabulation, the percentage of students expressing positive agreement (by selecting either "Strongly Agree" or "Agree") is reported as a combined total identified as: Agree. The two responses expressing disagreement ("Disagree" and "Strongly Disagree") were combined to produce a percentage representing the response: Disagree. For example, the pre-test modal response (Agree, 72%) for statement #1 was obtained by summing the "Strongly Agree" percentage (37.0%) and the "Agree" percentage (35.4%). This total (72.4%) exceeded the total for "Undecided" (2.3%) and also the sum (25.1%) of "Disagree" (18.8%) and "Strongly Disagree" (6.3%). Totals reported in this column of table are rounded.

* Asterisks indicate that modal response in the original five-response range was the extreme choice, i.e., "Strongly Agree" or "Strongly Disagree" as indicated. Check mark (✓) indicates a significant shift in attitudes (for criteria of "significant shift", see text).

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | TOTAL | | |
| | | No. | % | No. | % | No. | % | No. | % | No. % | (N) | Answer | % |
| 4. "Employers would rather hire older people (over 35) than young people (under 20). | Pr | 70 | 11.9% | 155 | 26.3% | 52 | 8.8% | 199 | 33.7% | 114 19.3% | 590 | D | 53% |
| | Po | 69 | 12.3 | 192 | 34.2 | 72 | 12.8 | 140 | 24.9 | 89 15.8 | 562 | A | 47 |
| 5. "A good reason for quitting a job is that you don't like the people you work with. | Pr | 28 | 4.7 | 75 | 12.7 | 38 | 6.4 | 219 | 37.1 | 230 39.0 | 590 | D* | 76 |
| | Po | 54 | 9.6 | 150 | 26.6 | 46 | 8.2 | 178 | 31.6 | 135 24.0 | 563 | D | 56 |
| 6. "Too much spending by the federal government is the main cause of inflation. | Pr | 84 | 14.3 | 207 | 35.3 | 177 | 30.2 | 90 | 15.3 | 29 4.9 | 587 | A | 50 |
| | Po | 69 | 12.3 | 172 | 30.6 | 156 | 27.7 | 118 | 21.0 | 48 8.5 | 563 | A | 43 |
| 7. "A more equal distribution of income than we presently have would be a good thing for America. | Pr | 99 | 16.9 | 249 | 42.4 | 125 | 21.3 | 87 | 14.8 | 27 4.6 | 587 | A | 59 |
| | Po | 85 | 15.1 | 221 | 39.3 | 170 | 30.2 | 62 | 11.0 | 25 4.4 | 563 | A | 54 |
| 8. "A married worker with a family should be paid more than a single worker even if both do exactly the same job. | Pr | 58 | 7.9 | 65 | 11.1 | 30 | 5.1 | 228 | 39.0 | 204 34.9 | 585 | D | 74 |
| | Po | 37 | 6.6 | 52 | 9.2 | 43 | 7.6 | 207 | 36.8 | 224 39.8 | 563 | D* | 77 |
| 9. "Actually, whatever success I have in my work career depends pretty much on factors beyond my control. | Pr | 46 | 7.8 | 129 | 22.0 | 151 | 25.7 | 148 | 25.2 | 113 19.2 | 587 | D | 44 |
| | Po | 27 | 4.8 | 109 | 19.3 | 117 | 20.7 | 173 | 30.7 | 138 24.5 | 564 | D | 55 |
| 10. "The sharp reduction in number of people working on farms during the past 20 years is something for the American people to be happy about. | Pr | 63 | 10.7 | 126 | 21.4 | 74 | 12.6 | 169 | 28.7 | 156 26.5 | 588 | D | 55 |
| | Po | 39 | 6.9 | 93 | 16.5 | 113 | 20.0 | 183 | 32.5 | 136 24.1 | 564 | D | 57 |

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | | TOTAL | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | (N) | Answer % |
| 11. "If a person plans his education and training carefully, he is almost sure to succeed in his job career. | Pr | 268 | 45.6% | 224 | 38.2% | 21 | 3.6% | 60 | 10.2% | 14 | 2.4% | 587 | A* 84 |
| | Po | 209 | 37.1 | 269 | 47.7 | 26 | 4.6 | 55 | 9.8 | 5 | .9 | 564 | A 85 |
| 12. "Most employers are sincerely interested in the welfare of their workers. | Pr | 96 | 16.3 | 312 | 53.0 | 81 | 13.7 | 88 | 14.9 | 12 | 2.0 | 589 | A 69 |
| | Po | 72 | 12.8 | 303 | 53.8 | 96 | 17.1 | 76 | 13.5 | 16 | 2.8 | 563 | A 67 |
| 13. "Automation is good for America and ought to be encouraged. | Pr | 87 | 14.8 | 202 | 34.4 | 198 | 33.7 | 63 | 10.7 | 37 | 6.3 | 587 | A 49 |
| | Po | 97 | 17.2 | 206 | 36.6 | 136 | 24.2 | 74 | 13.1 | 50 | 8.9 | 563 | A 54 |
| 14. "Labor unions are too strong today. | Pr | 79 | 13.4 | 162 | 27.3 | 146 | 24.7 | 167 | 28.3 | 36 | 6.1 | 590 | A 41 |
| | Po | 44 | 7.8 | 105 | 18.7 | 150 | 26.6 | 206 | 36.6 | 58 | 10.3 | 563 | D 47 |
| 15. "If someone gave me all the money I needed, I'd never go to work. | Pr | 60 | 10.2 | 73 | 12.4 | 40 | 7.8 | 193 | 32.7 | 224 | 45.7 | 590 | D* 78 |
| | Po | 64 | 11.4 | 49 | 8.7 | 50 | 8.9 | 161 | 28.6 | 239 | 42.5 | 563 | D* 71 |
| 16. "You can't get a job as a carpenter, plumber, or electrician unless you have 'connections' with a labor union. | Pr | 26 | 4.4 | 70 | 11.9 | 130 | 22.1 | 216 | 36.7 | 147 | 25.0 | 589 | D 62 |
| | Po | 21 | 3.7 | 74 | 13.2 | 114 | 20.3 | 221 | 39.3 | 132 | 23.5 | 562 | D 63 |
| 17. "The government should guarantee everyone in the country a decent standard of living. | Pr | 172 | 29.2 | 215 | 36.5 | 64 | 10.9 | 92 | 15.6 | 46 | 7.8 | 589 | A 66 |
| | Po | 125 | 22.2 | 181 | 32.2 | 87 | 15.5 | 123 | 21.9 | 47 | 8.4 | 563 | A 54 |

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | | TOTAL | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | (N) | Answer % |
| 18. "Our country's economic progress is due mainly to the free enterprise system. | Pr | 75 | 12.8% | 211 | 35.9% | 230 | 39.1% | 58 | 9.9% | 14 | 2.4% | 588 | A 49% |
| | Po | 107 | 19.0 | 255 | 45.3 | 164 | 29.1 | 31 | 5.5 | 6 | 1.1 | 563 | A 64 |
| 19. "I wouldn't care what my job was like, as long as the pay was high. | Pr | 36 | 6.1 | 67 | 11.9 | 27 | 4.6 | 204 | 34.7 | 254 | 43.1 | 588 | D* 78 |
| | Po | 22 | 3.9 | 29 | 5.1 | 23 | 4.1 | 197 | 35.0 | 293 | 52.0 | 564 | D* 87 |
| 20. "The farmer is the person who contributes most to our economic well-being. | Pr | 106 | 18.0 | 238 | 40.4 | 113 | 19.2 | 112 | 19.0 | 20 | 3.4 | 589 | A 58 |
| | Po | 58 | 10.3 | 133 | 23.6 | 156 | 27.7 | 172 | 30.5 | 45 | 8.0 | 564 | D 39 |
| 21. "Business should be controlled and regulated by government to protect the interests of the consumer. | Pr | 56 | 9.6 | 182 | 31.1 | 154 | 26.3 | 125 | 21.4 | 68 | 11.6 | 585 | A 41 |
| | Po | 55 | 9.8 | 151 | 26.8 | 126 | 22.4 | 141 | 25.0 | 90 | 16.0 | 563 | D 41 |
| 22. "All honest work is worthwhile, and therefore all workers deserve respect. | Pr | 279 | 47.6 | 212 | 36.2 | 33 | 5.6 | 48 | 8.2 | 14 | 2.4 | 586 | A* 84 |
| | Po | 212 | 37.8 | 268 | 47.8 | 39 | 7.0 | 35 | 6.2 | 7 | 1.3 | 561 | A 86 |
| 23. "Work is a necessary evil. | Pr | 44 | 7.5 | 80 | 13.6 | 76 | 12.9 | 154 | 26.2 | 234 | 40.0 | 588 | D* 66 |
| | Po | 47 | 8.4 | 82 | 14.6 | 83 | 14.8 | 161 | 28.7 | 189 | 33.6 | 562 | D* 62 |
| 24. "Most American workers are paid just about what they deserve. | Pr | 85 | 14.5 | 220 | 37.5 | 42 | 7.2 | 152 | 25.9 | 88 | 15.0 | 587 | A 52 |
| | Po | 61 | 10.9 | 252 | 45.0 | 64 | 11.4 | 116 | 20.7 | 67 | 12.0 | 560 | A 56 |
| 25. "You can't believe government statistics. | Pr | 30 | 5.1 | 86 | 14.6 | 220 | 37.4 | 194 | 33.0 | 58 | 9.9 | 588 | D 43 |
| | Po | 27 | 4.8 | 58 | 10.4 | 189 | 33.8 | 205 | 36.7 | 80 | 14.3 | 559 | D 51 |

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | TOTAL | | |
| | | No. | % | No. | % | No. | % | No. | % | No. % | (N) | Answer | % |
| 26. "The business man is the person who contributes the most to our economic well-being. | Pr | 39 | 6.6% | 161 | 27.4% | 158 | 26.9% | 185 | 31.5% | 44 7.5% | 587 | D | 39% |
| | Po | 39 | 7.0 | 162 | 29.0 | 184 | 32.9 | 147 | 26.3 | 27 4.8 | 559 | A | 36 |
| 27. "It's too early to start thinking about my life's work. | Pr | 20 | 3.4 | 38 | 6.5 | 15 | 2.6 | 178 | 30.4 | 334 57.1 | 585 | D* | 88 |
| | Po | 27 | 4.8 | 27 | 4.8 | 20 | 3.6 | 166 | 29.6 | 320 57.1 | 560 | D* | 87 |
| 28. "It will be hard for me to find a good job. | Pr | 28 | 4.8 | 69 | 11.8 | 102 | 17.4 | 265 | 45.3 | 121 20.7 | 585 | D | 66 |
| | Po | 24 | 4.3 | 103 | 18.4 | 141 | 25.1 | 202 | 36.0 | 91 16.2 | 561 | D | 52 |
| 29. "The federal government should guarantee everyone a job. | Pr | 65 | 11.1 | 148 | 25.2 | 75 | 12.8 | 200 | 34.1 | 99 16.9 | 587 | D | 51 |
| | Po | 54 | 9.6 | 150 | 26.6 | 83 | 14.7 | 202 | 35.9 | 74 13.1 | 563 | D | 49 |
| 30. "Labor unions keep the employer from taking advantage of the worker. | Pr | 81 | 13.8 | 249 | 42.5 | 151 | 25.6 | 78 | 13.2 | 30 5.1 | 589 | A | 56 |
| | Po | 129 | 22.9 | 262 | 46.5 | 113 | 20.0 | 44 | 7.8 | 16 2.8 | 564 | A | 69 |
| 31. "Most people who are unemployed are shiftless and lazy. | Pr | 95 | 16.1 | 159 | 27.0 | 50 | 8.5 | 173 | 29.4 | 112 19.0 | 589 | D | 48 |
| | Po | 77 | 13.7 | 107 | 19.0 | 58 | 10.3 | 198 | 35.1 | 124 22.0 | 564 | D | 57 |
| 32. "The only reason most people work is for the money. | Pr | 144 | 24.4 | 246 | 41.7 | 42 | 7.1 | 115 | 19.5 | 43 7.3 | 590 | A | 66 |
| | Po | 95 | 16.8 | 220 | 39.0 | 56 | 9.9 | 141 | 25.0 | 52 9.2 | 564 | A | 56 |
| 33. ""Taking it easy' on the job is all right as long as you don't get caught by the boss. | Pr | 24 | 4.1 | 60 | 10.2 | 36 | 6.1 | 176 | 29.8 | 294 49.8 | 590 | D* | 80 |
| | Po | 14 | 2.5 | 61 | 10.9 | 41 | 7.3 | 205 | 36.5 | 240 42.8 | 561 | D* | 79 |

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | | TOTAL | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | (N) | Answer % |
| 34. "The proper objective of all economic activity should be to satisfy the wants of consumers. | Pr | 71 | 12.1 | 227 | 38.7 | 216 | 36.7 | 56 | 9.6 | 16 | 2.7 | 586 | A 51 |
| | Po | 116 | 20.7 | 256 | 45.6 | 140 | 25.0 | 43 | 7.7 | 6 | 1.1 | 561 | A 66 |
| 35. "Government employees generally aren't as efficient and hard-working as people who work for private business. | Pr | 42 | 7.1 | 127 | 21.6 | 144 | 24.4 | 200 | 34.0 | 76 | 12.9 | 589 | D 47 |
| | Po | 35 | 6.2 | 90 | 16.0 | 181 | 32.2 | 193 | 34.3 | 63 | 11.2 | 562 | D 46 |
| 36. "Luck will play an important role in determining whether I get a good job. | Pr | 27 | 4.6 | 80 | 13.7 | 42 | 7.2 | 226 | 38.6 | 211 | 36.0 | 586 | D 75 |
| | Po | 28 | 5.0 | 77 | 13.7 | 59 | 10.55 | 234 | 41.7 | 163 | 29.1 | 561 | D 71 |
| 37. "Federal government activities in our economic system should be kept to a minimum. | Pr | 66 | 11.5 | 212 | 36.2 | 196 | 33.5 | 83 | 14.2 | 28 | 4.8 | 585 | A 48 |
| | Po | 42 | 7.5 | 203 | 36.1 | 204 | 36.2 | 99 | 17.6 | 15 | 2.7 | 563 | A 44 |
| 38. "High profits are necessary for the survival of our economic system. | Pr | 46 | 7.8 | 216 | 36.8 | 188 | 32.0 | 121 | 20.7 | 16 | 2.7 | 587 | A 45 |
| | Po | 42 | 7.5 | 204 | 36.5 | 186 | 33.3 | 107 | 19.1 | 20 | 3.6 | 559 | A 44 |
| 39. "Labor unions are the main cause of inflation. | Pr | 39 | 6.6 | 87 | 14.7 | 247 | 41.9 | 188 | 31.9 | 29 | 4.9 | 590 | U 42 |
| | Po | 24 | 4.3 | 58 | 10.3 | 186 | 33.0 | 225 | 40.0 | 70 | 12.4 | 563 | D 52 |
| 40. "The major cause of inflation is high profits of business. | Pr | 48 | 8.1 | 158 | 26.8 | 214 | 36.3 | 146 | 24.7 | 24 | 4.1 | 590 | U 36 |
| | Po | 51 | 9.1 | 180 | 32.0 | 192 | 34.1 | 109 | 19.4 | 31 | 5.5 | 563 | A 41 |

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | | TOTAL | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | (N) | Answer % |
| 41. "Poverty will always be a serious problem for millions of families in the U. S. | Pr | 121 | 20.6% | 235 | 40.0% | 61 | 10.4% | 133 | 22.7% | 37 | 6.3% | 587 | A 61% |
| | Po | 113 | 20.1 | 243 | 43.3 | 71 | 12.7 | 110 | 19.6 | 24 | 4.3 | 561 | A 63 |
| 42. "Good working conditions on the job are more important than high pay. | Pr | 138 | 23.5 | 254 | 43.3 | 91 | 15.5 | 85 | 14.5 | 19 | 2.2 | 587 | A 67 |
| | Po | 129 | 23.0 | 267 | 47.6 | 82 | 14.6 | 64 | 11.4 | 19 | 3.4 | 561 | A 71 |
| 43. "Taxes are too high in the United States. | Pr | 222 | 37.8 | 185 | 31.5 | 70 | 11.9 | 85 | 14.5 | 26 | 4.4 | 588 | A* 69 |
| | Po | 157 | 28.0 | 175 | 31.2 | 117 | 20.9 | 95 | 16.9 | 17 | 3.0 | 561 | A 59 |
| 44. "The worker is the person who contributes most to our economic well-being. | Pr | 117 | 19.9 | 256 | 43.5 | 134 | 22.8 | 64 | 10.9 | 17 | 2.9 | 588 | A 63 |
| | Po | 113 | 20.1 | 307 | 54.6 | 101 | 18.0 | 35 | 6.2 | 6 | 1.1 | 562 | A 75 |
| 45. "Public schools in Ohio communities generally have enough money to provide a good education for all children. | Pr | 169 | 28.9 | 265 | 45.1 | 50 | 8.5 | 72 | 12.3 | 31 | 5.3 | 587 | A 74 |
| | Po | 121 | 21.7 | 287 | 51.5 | 54 | 9.7 | 61 | 11.0 | 34 | 6.1 | 557 | A 73 |
| 46. "Men ought to get higher pay than women even if both do exactly the same work. | Pr | 35 | 6.0 | 48 | 8.2 | 33 | 5.6 | 164 | 28.0 | 306 | 35.2 | 586 | D* 63 |
| | Po | 23 | 4.1 | 37 | 6.6 | 44 | 7.8 | 144 | 25.7 | 313 | 55.8 | 561 | D* 82 |
| 47. "Workers today don't take much pride in their work. | Pr | 58 | 9.9 | 178 | 30.4 | 106 | 18.1 | 167 | 28.5 | 76 | 13.0 | 585 | D 42 |
| | Po | 50 | 8.9 | 161 | 28.8 | 97 | 17.3 | 188 | 33.6 | 64 | 11.4 | 560 | D 45 |
| 48. "The main purpose of our economic system should be to satisfy the needs and wants of the American people. | Pr | 138 | 26.7 | 268 | 46.0 | 116 | 20.0 | 49 | 8.4 | 12 | 2.1 | 583 | A 73 |
| | Po | 159 | 28.4 | 289 | 51.6 | 70 | 12.5 | 31 | 5.5 | 11 | 2.0 | 560 | A 80 |

Table 4-5 (cont.)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | OMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | TOTAL | | |
| | | No. | % | No. | % | No. | % | No. | % | No. % | (N) | Answer | % |
| 49. "Married women with children under 15 should not hold a job. | Pr | 119 | 20.4% | 134 | 23.0% | 53 | 9.1% | 163 | 28.0% | 114 19.6% | 583 | D | 48% |
| | Po | 88 | 15.7 | 126 | 22.5 | 77 | 13.8 | 183 | 32.7 | 85 15.2 | 559 | D | 48 |
| 50. "People who really want to work can always find a job. | Pr | 157 | 26.9 | 205 | 35.1 | 41 | 7.0 | 134 | 22.9 | 47 8.0 | 584 | A | 62 |
| | Po | 126 | 22.5 | 191 | 34.1 | 39 | 7.0 | 159 | 28.3 | 46 8.2 | 561 | A | 57 |
| 51. "A worker who is a college graduate ought to be paid at least twice as much as a high school graduate. | Pr | 64 | 10.9 | 134 | 22.8 | 81 | 13.8 | 205 | 34.9 | 103 17.5 | 587 | D | 52 |
| | Po | 68 | 12.1 | 169 | 30.1 | 102 | 18.2 | 162 | 28.8 | 61 10.9 | 562 | A | 42 |
| 52. "I think my chances of getting a good job will be a lot better than my father had. | Pr | 141 | 24.1 | 205 | 35.1 | 91 | 15.6 | 107 | 18.3 | 40 6.8 | 584 | A | 59 |
| | Po | 154 | 27.8 | 001 | 36.3 | 84 | 15.2 | 82 | 14.8 | 33 6.0 | 554 | A | 64 |
| 53. "Young people need a lot more help in finding jobs than they are getting now. | Pr | 114 | 19.6 | 257 | 44.1 | 91 | 15.6 | 103 | 17.7 | 18 3.1 | 583 | A | 64 |
| | Po | 81 | 14.6 | 252 | 45.5 | 106 | 19.1 | 102 | 18.4 | 13 2.4 | 554 | A | 60 |
| 54. "The best jobs go to people who have connections and 'pull'. | Pr | 59 | 10.1 | 158 | 27.1 | 131 | 22.5 | 167 | 28.7 | 67 11.5 | 582 | D | 40 |
| | Po | 42 | 7.5 | 148 | 26.6 | 139 | 25.0 | 161 | 28.9 | 67 12.0 | 557 | D | 41 |
| 55. "Women ought to be able to rise just as high in the world as men. | Pr | 238 | 40.7 | 202 | 34.5 | 52 | 8.9 | 70 | 12.0 | 23 3.9 | 585 | A* | 75 |
| | Po | 247 | 44.4 | 169 | 30.4 | 54 | 9.7 | 63 | 11.3 | 23 4.1 | 556 | A* | 75 |
| 56. "Industry today should give special preference in hiring and promotion to negro workers over white workers to make up for past discrimination. | Pr | 77 | 13.2 | 99 | 17.0 | 169 | 29.1 | 150 | 25.8 | 86 14.8 | 581 | D | 41 |
| | Po | 55 | 9.9 | 95 | 17.0 | 185 | 33.2 | 152 | 27.2 | 71 12.7 | 558 | D | 40 |

Table 4-5 (concluded)

| | | NUMBER AND PERCENTAGE OF RESPONSES | | | | | | | | | | TOTAL | COMPOSITE MODAL RESPONSE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | "Strongly Agree" | | "Agree" | | "Undecided" | | "Disagree" | | "Strongly Disagree" | | | | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | (N) | Answer | % |
| 57. "I'll need a high school diploma in order to get a good job. | Pr | 292 | 50.3% | 202 | 34.8% | 22 | 3.8% | 43 | 7.4% | 21 | 3.6% | 580 | A* | 85% |
| | Po | 246 | 44.8 | 229 | 41.7 | 25 | 4.6 | 38 | 6.9 | 11 | 2.0 | 549 | A* | 87 |
| 58. ✓ "The government's national debt is getting so big that our country is in danger of going bankrupt. | Pr | 66 | 11.3 | 107 | 18.3 | 214 | 36.6 | 139 | 23.8 | 58 | 9.9 | 584 | U | 37 |
| | Po | 31 | 5.6 | 78 | 14.0 | 223 | 40.0 | 162 | 29.1 | 63 | 11.3 | 557 | D | 40 |
| 59. ✓ "The Ohio State Employment Service could probably help me find a good job. | Pr | 69 | 11.9 | 324 | 55.7 | 114 | 19.6 | 55 | 9.4 | 20 | 3.4 | 582 | A | 68 |
| | Po | 138 | 24.8 | 335 | 60.3 | 45 | 8.1 | 30 | 5.4 | 8 | 1.4 | 556 | A | 85 |
| 60. "Industry should hire high school graduates rather than dropouts. | Pr | 200 | 34.6 | 208 | 36.0 | 74 | 18.2 | 77 | 13.3 | 19 | 3.3 | 578 | A | 71 |
| | Po | 173 | 31.1 | 226 | 40.6 | 94 | 16.9 | 55 | 9.9 | 9 | 1.6 | 557 | A | 72 |
| 61. "Government economists contribute more to the economic well-being of our country than businessmen do. | Pr | 30 | 5.2 | 122 | 21.3 | 272 | 47.5 | 119 | 20.8 | 30 | 5.2 | 573 | U | 48 |
| | Po | 29 | 5.3 | 93 | 16.9 | 259 | 46.9 | 135 | 24.5 | 36 | 6.5 | 552 | U | 47 |
| 62. "An understanding of economics would be very helpful to junior high school students in planning their careers. | Pr | 302 | 52.7 | 198 | 34.6 | 41 | 7.2 | 17 | 3.0 | 15 | 2.6 | 573 | A* | 87 |
| | Po | 325 | 58.7 | 170 | 30.7 | 37 | 6.7 | 13 | 2.4 | 9 | 1.6 | 554 | A* | 89 |

Students in the control group changed their attitudes on 11 items (18% of the total) between the pre-test and post-test. (Note: This analysis uses the pre-test instructional group as a proxy for the pre-test control group). Of further interest is the fact that the control group selected "undecided" as the post-test modal response on 10 items, whereas the instructional group chose "undecided" as its modal response only once on the post-test compared with four items in the pre-test. This finding suggests that the course helped students make up their minds more clearly on manpower and economic concerns. (It also raises a question about the validity of using the pre-test instructional group as a proxy for the pre-test control group, a procedure that was followed because of shortages of time, manpower, and funds).

In the interest of brevity, there will be no extensive analysis in this report of particular attitude changes and the possible reasons for such changes. This type of interpretive analysis may be illustrated by examining two items: #14 and #28.

On the pre-test, 41% of the students in the instructional group agreed with statement #14 that "Labor unions are too strong today", while 34% disagreed. On the post-test, only 26% agreed with the statement, whereas 47% disagreed. One may speculate that increased awareness and understanding of the institution of work and the distribution of income in the U. S. economy fostered a more sympathetic student attitude toward labor unions, while at the same time information derived from the course on the actual size and power of unions may have reduced the fear and hostility that students had previously felt about unions. (Eighth graders in the control group were "undecided" on this item in the post-test).

On the pre-test, 66% of the instructional students disagreed with statement #28 ("It will be hard for me to find a good job"), whereas on the post-test only 52% disagreed. This might suggest that, while students still were not pessimistic about future employment opportunities, the course may have had a sobering influence on their expectations.

There were no significant shifts in attitude on several interesting items (e.g., #11, "If a person plans his education and training carefully, he is almost sure to succeed in his job career"; #22, "All honest work is worthwhile, and therefore all workers deserve respect"; and #42, "Good working conditions on the job are more important than high pay") because the students agreed overwhelmingly before the experimental course started and apparently found little or nothing in the course to change their attitudes.

Further evidence suggesting that the experimental course did make a difference in terms of the attitudes of students in the instructional group is found in the student and teacher evaluations. Eighty-three per cent of the eighth graders indicated that the course did cause them "to take a careful look at yourself and what you want to do with your life" (see responses to Questions A-4 in Appendix VI-1).

Responses to items A-5, C-5, C-6, and E in Appendix VI-1 provide additional evidence of the impact that the MD/OAEL course had on student attitudes. In their free responses to questions C-5 and C-6 ("What two things that you learned from the course are most worthwhile?" and "Do you think the course will influence your future education, your career, and your life in general? How?"), approximately two-thirds of the students who answered the question indicated that they now realized more than ever how very important it is to get a good education.

Teachers and other school officials also emphasized the effect of the course on student attitudes and values (see responses to Question #3 in Appendix VI-2). One teacher, for example, wrote that "the students did develop an awareness of society's future expectations from them, they did seem to develop an understanding of the need for furthering their education." Another teacher said that he "observed many changes in specific attitudes, such as: from 'school is boring' to 'why drop out; that is dumb'."

The third and last element in the hypothesis raised the question: Does manpower/economic education make a difference with respect to <u>behavior</u>, in the short run and in the long run? Limitations of budget, manpower, and time to a great extent placed this question beyond the scope of the immediate project. However, the effects of the experimental course on the behavior, especially the long-run behavior of students in the treatment group, is acknowledged to the central research question of the overall project as envisaged by the investigators.

Short-run behavior changes in students enrolled in the course could be observed by teachers, guidance counselors, principals, parents, and others, including fellow students. Specific forms of relevant behavior include: school attendance, dropouts, study habits, school performance and grades, contacts with guidance counselors, personal conduct at school and at home, out-of-class reading, use of school library, part-time employment, etc.

Casual efforts were made to note short-run behavior changes in interviews that the investigators had with students, teachers, guidance counselors, and others, and by means of the two subjective evaluation instruments, responses to which appear in Appendix VI. Following are some examples of behavior changes that were observed. Individual cases of improved school attendance and academic performance were reported. Some of the teachers noted that boys were participating in class discussion more actively in the MD/OAEL course than in other classes, where discussion tended to be dominated by girls. Students, teachers and school officials observed that parents showed considerable interest in the lessons and that students were talking with their parents about the course. Several of the 10th-grade students asked their teacher for assistance in finding part-time jobs, explaining that they had learned how work could satisfy some of their needs (e.g., for status and income) and also provide them with valuable experience. Guidance counselors

reported an increase in the number of student inquiries about career opportunities. Teachers commented on improved class behavior and discipline because of the relevance of the course and the personal involvement of the students. One teacher emphasized the greater maturity that his students showed in the experimental course. For detailed examples of short-run behavior changes observed by teachers and other school personnel, see Appendix VI-2, especially Question #3.

Eighth-grade dropout rates in Lancaster and Zanesville and ninth-grade dropout rates in the two Columbus schools involved in the experiment were already so low (under 5%) that the effectiveness of the course as a dropout deterrent could not be readily tested. (The vast majority of students are below age 16 and not eligible to withdraw from school under normal circumstances anyway.) With respect to the 10th graders, the director of guidance for Lancaster schools reported that the MD/OAEL course did have a definite impact on school retention. A dropout rate of 30% to 40% had been anticipated for the special group of 55 students identified as "potential dropouts" and enrolled in the experimental course, according to the guidance director. By the end of the school year, only three of these students (5.4%) had actually dropped out. (One student entered the armed forces, one went to work, and one was sent to a correctional institution). Both the teacher and the guidance counselor stated that the MD/OAEL course was a major factor in causing this surprisingly low dropout rate.

Turning to the question of long-run behavior changes, we can report that data have been compiled on all students included in the instructional and control groups for intended use in a proposed longitudinal study of their education, training, and labor force behavior. A separate "Pupil Personnel Information Form" (code: PPIF, see Appendix V) has been completed for the 767 eighth, ninth, and tenth graders in the instructional group and the 663 eighth, ninth, and tenth graders in the control group. Information recorded on this form includes the student's name, sex, social security number, date of birth, race, home address, school, parents' names and occupations, family income and other data, scholastic record, and scores made on tests of mental ability and manpower/economic understanding.

The forms were designed to be completed by guidance counselors and/or teachers based on school records and personal interviews with students, but in some cases (contrary to our instructions) students filled out parts of the forms themselves. Family income level in most cases was estimated by school personnel based on their knowledge of the community's wage structure and family status.

A total of 1,430 forms have been checked by the project staff and filed for future use. Because of budgetary and time constraints, no comprehensive tabulations have so far been made. However, an inspection of 50 completed PPIFs for students in the 10th-grade instructional group disclosed the following information: a mean I.Q. of 92, 33 male students and 17 female, 49 Caucasion and one Negro, median 1966 family income in the $4,000-$6,000 range with 10 of the 50 students coming from families reporting incomes below $4,000.

In addition to the effect that the MD/OAEL course had on student understanding, attitudes, and behavior with respect to economic and manpower concerns, there are at least two additional criteria that are relevant to an evaluation of the program: student interest (did they like the course?), and educational efficiency (from the viewpoint of real costs and benefits, was the course worthwhile?).

Student interest is revealed in Appendix VI-1, especially Item D-2, in which it is shown that 39% of the students felt the course was of "average" interest compared with other courses they had taken, 37% rated it "above average" or "outstanding" in interest, while 24% rated it "below average" or "poor" in interest. The investigators interpret these responses to indicate that the course was successful, but not dramatically so, in terms of student interest. Responses to the other items in Part D of the student questionnaire indicate that the students felt they learned a great deal and the course was extremely valuable in terms of their future decisions and actions; they did not find the course to be especially difficult; overall, they gave it a very high rating. (See Appendix VI-1, Part D). Responses to Parts A, B, C, and E in the same appendix reveal additional student reactions to the course.

No attempt was made to apply conventional cost/benefit analysis to this project. It is apparent, however, that abnormal administrative and teacher costs are associated with an experimental project of this type; and also that numerous indirect as well as direct benefits accrue. Among the various indirect benefits are increased student and faculty enthusiasm, improvements in students' vocabulary and discussion skills, community awareness of educational innovation in their schools, psychological preparation for subsequent school programs (e.g., orientation to a new vocational high school and post-high school technical institute scheduled to open in one of the experimental school systems next year), etc. Some of these cost and benefit factors are mentioned in Appendix VI-2.

In summary, the experimental MD/OAEL course has been evaluated in terms of its effect on student understanding, attitudes, and behavior as measured by mean scores on the "Manpower Economics Test of Understanding" and opinion responses to the "Survey of Manpower and Economic Attitudes". Controlled experiments were conducted to determine the differential effect of the experimental course on the understanding and attitudes of eighth, ninth, and 10th-grade students. Significant differences were observed for eighth graders in the post-test means and gain scores of the instructional versus the control group. Differences were also observed in the attitudes and attitude changes of the instructional versus control groups. Additional evaluation of student behavior and other factor was performed by means of a student questionnaire, an evaluation instrument for teachers and other school officials, personal interviews, and direct observations by the project staff.

Data have been compiled that will be useful in studying the long-run behavior of students involved in the project with respect to their education, training, and labor force success. Lack of time, money, and personnel has limited the amount of evaluation activity performed to date.

It is hoped that support will be forthcoming to permit the investigators to perform further evaluation analysis in the future, including correlations between understanding and attitudes as reflected by the two project instruments. In addition, it is hoped that support will be available to carry out a proposed longitudinal study of the student population at intervals of four, 10, and 15 years (i.e., survey the students in instructional and control groups in 1971, 1977, and 1982 to determine their educational attainment, training, employment record, earnings, work satisfaction, and related information).

## 5. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

"Work diligently with integrity . . . You will always get your reward!"

In Chapter 2 above ("Purposes and Objectives of the Project"), seven specific objectives were listed for this research and curriculum development project:

1 -- Identify appropriate CONTENT for a junior or senior high school course in applied economics stressing occupational opportunities and labor market processes, aimed at bridging the gap between school and work;

2 -- Determine the feasibility of introducing manpower and economic education into the school curriculum as a separate COURSE at various grade levels and under a variety of alternative teacher-subject circumstances;

3 -- Write a set of INSTRUCTIONAL MATERIALS for a self-contained course incorporating the appropriate information and concepts in a form suitable for experimental use in the schools;

4 -- Develop valid and reliable EVALUATION instruments and procedures to test the pre and post-treatment understanding, attitudes, and behavior of students with respect to manpower and other economic concerns;

5 -- FIELD-TEST the instructional materials and evaluation procedures in a number of schools;

6 -- ANALYZE the results of field-testing;

7 -- Promptly DISSEMINATE the experimental findings and the instructional and evaluation materials among educators and the community at large in order to encourage further experimentation, use, and improvement of the program.

The investigators believe that all seven of these objectives have been achieved in varying degrees.

First: Appropriate content has been successfully identified for an instructional program focusing on the role of men and women in the economic process, in their capacity as workers (human resources), and as people. This content, validated by specialists in education and economics, centers around the themes of -- the Economic System, the Nature of Work (including both its economic and noneconomic dimensions), Decisionmaking (for personal and public choices), the structure and functioning of the Manpower Market, Occupational Opportunities, Skills and the Economic Value of Education, and Technology (including the impact of technological change on the economy and society).

Second: It has been demonstrated by empirical test that it is indeed feasible to introduce a program of manpower and economic education into the school curriculum as a separate course at the eighth grade level, as well as at the ninth and 10th-grade levels. Such a course can be taught by teachers with varied experience and training, within the framework of programs in Social Studies, General Business, and Group Guidance.

Third: Instructional materials have been prepared for use in a one-semester course. The course was originally produced in mimeograph form under the title: "Manpower Development/Opportunities in American Economic Life", with supplementary materials for the teacher. Subsequently the materials were extensively revised and published(by photo-offset printing) as a Revised Experimental Edition under the title: Manpower & Economic Education (see Appendix I of the Final Report), with a separate Teacher Manual (see Appendix II).

Fourth: Two major evaluation instruments were constructed by the project staff: "Manpower Economics Test of Understanding" (40 multiple choice questions), and "Survey of Manpower & Economic Attitudes" (62 agree-disagree items). These were pilot-tested, validated, tested for reliability, and administered on a pre and post basis. A "Pupil Personnel Information Form" was used to compile information needed for the purpose of long-run evaluation. Additional evaluation of the course was performed by means of a student questionnaire ("Summing Up: The Student Talks Back") and a questionnaire for teachers and other school officials ("Evaluation of MD/OAEL Course").

Fifth: The experimental course was field-tested during the fall semester, 1967-68, in eight schools in central and southeastern Ohio (620 students at the eighth-grade level in Lancaster and Zanesville, 92 students at the ninth-grade level in Columbus, and 55 students at the 10th-grade level in Lancaster). Control groups were established for each grade level.

Sixth: The results of field-testing the experimental course were measured, analyzed, and evaluated by means of the instruments and questionnaires identified above. Additional procedures were described in Chapter 4 of this Final Report.

Seventh: Dissemination of instructional materials to schools and the educational community at large has already commenced, under special arrangements authorized by the Office of Education (letter to the principal investigator dated January 18, 1968, from Dr. Philip R. Teske, Division of Comprehensive and Vocational Education Research, USOE). A 316-page book, Manpower & Economic Education, and companion 141-page Teacher Manual were published in May, 1968, and advertised for sale through a cooperative arrangement involving the Ohio University Center for Economic Education, the authors of the Revised Experimental Edition, the Joint Council on Economic Education (New York City), and The Interstate Printers and Publishers, Inc. (Danville, Illinois). Dissemination of research findings will be achieved by means of the present "Final Report to the U. S. Office of Education", articles in professional and popular journals, papers presented at professional meetings, publication of a brief monograph ("Manpower Education in a Growing Economy") scheduled for release in August, 1968, and other media. Full details of dissemination and public information concerning the project are reported in Appendix VII.

Comparison of Final Report with Original Research Proposal. The final design and actual implementation of the project differed in certain respects from the original plan, as described in the initial and revised proposals. The basic purposes and procedures, however, were unchanged. A comparison of the revised proposal dated August 12, 1965 (grant award dated June 24, 1966), with the Final Report discloses the following differences among others.

First, the content of the experimental course emphasized the role of the individual as a worker and income-earner to an even greater extent than was originally intended. The economic roles of the individual as consumer and as citizen were described only briefly. Second, the proposed economic base studies of the communities involved in field-testing the experimental course were not undertaken. In part this reflected our desire to generalize the experiment, rather than orient it to a particular community or type of socio-economic structure. No special attention was given to purely local employment conditions and trends.

Third, the proposal to involve local businessmen, labor leaders, and others in the project as members of a Community Advisory Committee (to provide advice and public support) was not endorsed by the schools and was therefore abandoned. Similarly, no formal School Coordinating Committee was established, although communication, advice, and cooperation were achieved through the respective Project Coordinators. Fourth, the basic experiment was conducted with eighth-grade students. Side experiments were conducted with small groups of ninth graders and tenth graders, but no instruction was provided at the 11th and 12th-grade levels as originally suggested.

Finally, there was less involvement of guidance counselors as members of teaching teams working with classroom teachers than originally planned. One school system did not have guidance counselors at the junior high school level, while the other systems preferred to have their counselors participate in the project in only a limited way.

General and Miscellaneous Comments about the Project. What started out as an experimental junior high school course in occupational opportunities and labor market processes, or an in-depth program of pre-labor force manpower development -- stressing the educational and employment opportunities that exist in American economic life -- actually turned out to be something more. As it evolved through the research, planning, and writing phases of the project, the course emerged as a study of man as a Human Resource (i.e., the worker as a means of production), man as a Person (i.e., an end to be served by the economy and society), and the effects of the Institution of Work on our total lives. The principal value of the course, as the investigators view it, lies in its contribution to a better understanding of how individual men and women as workers fit into the economic process, and how our lives are influenced by the ever-changing social and economic environment that surrounds us. Our research indicates that manpower/economic education does indeed make a difference with respect to the understanding, attitudes, and behavior of the people who are exposed to instructional programs of this type. By developing understanding, students appear to formulate more realistic attitudes, which in turn can induce behavior more consistent with effective participation in economic life and more successful confrontation with life in all its various social aspects.

Beyond this broad generalization, the following specific observations and recommendations are made for the final record of this project:

1) An intensive program of manpower and economic education -- such as the MD/OAEL course -- can be taught effectively at any grade level from eight through twelve, on a required or elective basis, by teachers with varied training and experience (e.g., in social studies, business education, distributive education, home economics, industrial arts) who are provided with an orientation to manpower and economic education by means of a pre-school workshop or summer institute or other in-service program.

2) Although economic education and vocational guidance should be a continuing effort, integrated into the normal school curriculum and guidance program, 7-12, a strong case can be made for scheduling a separate one-semester course in order to present this material in a unified structure and with dramatic impact. Such a course should come preferably no later than the 10th grade in order to exert optimal influence on adolescent students in terms of their aspirations, identity-formulation, curriculum planning, motivation, and tentative occupational choice.

3) Guidance counselors, especially those with a strong background and professional interest in vocational counseling, appear to understand and approve of the MD/OAEL course and can be an excellent source of support and assistance in instructional implementation, either as members of a teaching team or as support personnel meeting with students individually for the purpose of counseling and providing additional information concerning occupational opportunities.

4) The course has strong motivational power because of its direct relevance to the present and future needs and experience of students.

5) Students and teachers liked the "active participation" aspects of the course, such as student participation in class discussion, role playing, writing answers to short questions posed in the lessons, interpretation of statistical data presented in tables and charts, etc.

6) Teachers and other school personnel involved in field-testing the MD/OAEL course report that all students, regardless of ability level or curriculum orientation (vocational, academic, general) benefit greatly from the course, but they are divided among themselves concerning the specific type of student who benefits most from the course. Emphatically, the course is <u>not</u> "for high school dropouts and terminal students <u>only</u>".

7) Students who enrolled in the MD/OAEL program are convinced that the course will exert an influence on their lives, in part by impressing them with the important role that education plays in determining economic success.

8) Parents and the community in general appear to approve of this type of curriculum innovation when its nature and objectives are clearly explained and when teachers, principals, and administrative officials all participate in planning and implementation. On the other hand, if the new program were introduced without a clear explanation of its nature and objectives, it is easy to see how teachers, parents, and the general public could formulate a negative and hostile attitude toward the new course dealing as it does with such sensitive matters as economic education, personality development, career planning, and occupational choice.

9) The daily lesson format that was used -- typically a four-page lesson with introduction, main body, discussion questions, statistical data, and summary and conclusions -- was well received by students, teachers, and principals. This technique of presenting instructional material in small, daily units (in the form of loose-leaf materials accumulated and retained by students in a three-ring binder) rather than in conventional textbook chapters and sections covered over a longer period of time, appears to have considerable merit and might be the subject of additional experimentation and evaluation as an instructional method, apart from manpower education per se.

10) Skills acquired and practiced in the experimental MD/OAEL course have high transfer value for other courses (as well as for employment!). For example, reading parts of lessons aloud in class and learning terminology and new general vocabulary have implications for English (i.e., oral and written communication); emphasis on statistical tables and charts can help quantitative skills in mathematics and bookkeeping (i.e., computation); information on technological and institutional changes adds to an understanding of U. S. and World History as well as Civics (i.e., group relations); study of technology may increase interest and understanding of General Science and Industrial Arts; lessons dealing with human development and self-analysis should be useful in Psychology and Guidance (i.e., group relations).

11) Further experimentation is recommended with one particular procedure used in the MD/OAEL course, viz., presenting instructional programs that do not require out-of-class study. (The investigators' original optimism and support for this approach to teaching the MD/OAEL course was in no way diminished by the results of field-testing, although this variable was not subjected to special evaluation).

12) The investigators believe that the course could be taught effectively over a period of two semesters, with two or three class sessions held weekly, perhaps in the framework of a group guidance program. Whether this procedure would be more or less successful than the one-semester, daily-class approach requires further investigation.

13) The amount of enthusiasm and support that teachers, administrative officials, and other school personnel demonstrate for the project will have an important effect on the success or failure of an experimental program of this type. The MD/OAEL project was fortunate in having excellent cooperation and professional response from the school personnel involved.

14) The general research capability, experience, and commitment of the sponsoring institution can be a significant factor in determining the success or failure of any long-term project. Of particular importance are: availability of competent consultant and support personnel (including graduate assistants and clerical staff), clarity and stability of administrative procedures, adequacy of office space and equipment (e.g., typewriters, shelves, telephones) and general policies of support to faculty members engaging in research activities.

15) An unanticipated cutback in federal funds for the second year of the project -- after commitments had been made to provide the three cooperating school systems with instructional materials for the Fall semester, 1967-68 -- created serious problems for the project. The reduction made it necessary to cut all personnel from the project except for the secretary, full-time associate investigator, and principal investigator (who was obliged to increase his teaching load in order to reduce the amount of project money allocated to his salary). This loss of personnel meant that the two investigators were required to perform additional work that normally would have been done by consultants, research assistants, and clerical personnel.

16) It may be assumed that a research and curriculum project of this type will inevitably require many extra hours of work on the part of the project staff beyond the demands of a normal faculty position. In this particular project, however, in part because of problems identified in items 14 and 15 above, the actual number of hours of professional effort was extraordinarily great. The principal investigator and the associate investigator together worked Saturdays, Sundays, holidays, and vacation periods amounting to approximately 294 man-days of work in excess of official university standards (excluding daily overtime work) during the two-year life of the project. An estimated $16,200 in opportunity costs of professional services was contributed by the investigators in the form of a subsidy to the project and dissemination effort, without which, given the unusual circumstances, the work could not have been completed as scheduled.

17) Finally, the exceptional skill, resourcefulness, dedication, and productivity of the project secretary -- Mrs. Vicki Williams -- contributed immeasurably to the successful completion of the project.

Looking to the Future. The project investigators feel that a useful beginning has been made in meeting the need for an instructional program in the school curriculum specifically aimed at preparing young people to understand and effectively participate in the U. S. economic system in their capacity as workers and income earners. Research results, professional response, and public interest all have been quite positive. A great deal of work remains to be done, however, including: additional processing and evaluation of data accumulated during the project; long-run observation and evaluation of student behavior; additional experimentation with the Manpower & Economic Education materials involving larger numbers of teachers and students in varying circumstances; adaption of the instructional materials for special groups (e.g., Negroes, American Indians, residents of rural Appalachia, disadvantaged Spanish-surname youth, and others) and special uses (adult education, Upward Bound and other economic opportunity programs, and at other levels in the school and college curriculum).

* * * *

The investigators wish to express their appreciation to the Office of Education and to Ohio University for financial support in carrying out this two-year research and curriculum development program. It is our hope and intention to continue working in the field of manpower and economic education in future years in order to contribute to curriculum improvement in the schools and to a better understanding of the economic roles that men and women play in American society.

#

Robert L. Darcy — June 26, 1968

Robert L. Darcy, Principal Investigator — Date

Phillip E. Powell — June 26, 1968

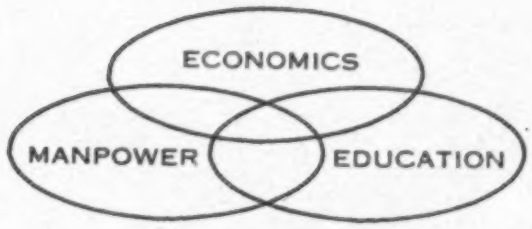
Phillip E. Powell, Associate Investigator — Date

# APPENDIX I

## MANPOWER & ECONOMIC EDUCATION:

## Opportunities in American Economic Life

Following is the Revised Experimental Edition of the MD/OAEL course as it was published — under the title *Manpower & Economic Education* — by the Joint Council on Economic Education and The Interstate Printers and Publishers, Inc. Although the lessons have been modified in form and detail since classroom testing during the Fall semester, 1967-68, the contents of the text remains the same. Originally, the lessons were mimeographed, printed on one side of the page, stapled, punched for a three-ring binder, and distributed in loose-leaf form.




# MANPOWER & ECONOMIC EDUCATION

## Opportunities in American Economic Life

Robert L. Darcy

Phillip E. Powell

published and distributed by
JOINT COUNCIL ON ECONOMIC EDUCATION, 1212 AVENUE OF THE AMERICAS, NEW YORK 10036

# MANPOWER & ECONOMIC EDUCATION:

By

ROBERT L. DARCY and PHILLIP E. POWELL

(Revised Experimental Edition)

Joint Council on Economic Education
1212 Avenue of the Americas
New York, N. Y. 10036

The Interstate Printers and Publishers, Inc.
Danville, Illinois 61832

MANPOWER & ECONOMIC EDUCATION: Opportunities in American Economic Life. By Robert L. Darcy and Phillip E. Powell.

A major portion of the work presented herein was performed pursuant to a grant from the U. S. Office of Education, Department of Health, Education, and Welfare.

Pending approval of the final report of the project by the U. S. Office of Education, these materials are distributed at this time for examination and experimental use only, subject to controls established by the Center For Economic Education, Ohio University.

Reproduction and distribution of these materials is undertaken by the Center in cooperation with the Joint Council on Economic Education and The Interstate Printers and Publishers, Inc., in order to assist in the further development and dissemination of the results of this project. For information concerning availability of these materials for experimental classroom use, address Center For Economic Education, College of Business Administration, Copeland Hall, Ohio University, Athens, Ohio 45701 or Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036.

April 1968.

## FORWARD

The Joint Council on Economic Education is pleased to make available Manpower and Economic Education by Dr. Robert L. Darcy and Mr. Phillip E. Powell.

Those who are actively engaged in economic education will immediately recognize the importance of this work since it focuses squarely on an area of great need. Recognition is devoted to the worker in his role as an income earner and producer. Moreover, the creative approach of the authors meets head-on the motivational factors involved in teaching economics.

Dr. Darcy and Mr. Powell are Director and Associate Director, respectively, in the Center for Economic Education. The Center is located in the College of Business Administration, Ohio University and has a long history of close cooperation with the Joint Council on Economic Education.

M. L. Frankel, Director
Joint Council on Economic Education

About the authors . . .

ROBERT L. DARCY received his Ph. D. in Economics from the University of Colorado, M. A. from Indiana University, and B. A. from Knox College. Since 1961 he has been Director of the Center for Economic Education and Associate Professor of Economics at Ohio University. He has written and edited economic education publications, directed workshops for teachers, and served as consultant to the Joint Council on Economic Education, the U. S. Office of Education, and other agencies. In September, 1968, he joins the faculty of Colorado State University as Professor of Economics.

PHILLIP E. POWELL holds an M. A. T. degree in Social Studies and B. S. in Economics and Finance, both from Indiana University. From 1960 to 1966 he taught economics and social studies in Ohio public schools. Since 1966, he has been a Manpower Research Specialist in the Center for Economic Education at Ohio University, and recently was named Associate Director of the Center.

# PREFACE

What follows is an economic education course written from the viewpoint of the individual as a worker/income-earner, and as a person. Its primary purpose is to provide the schools with a means for improving the preparation of young people for effective participation in the changing economy. Or, using the language of the 1967 Manpower Report of the President, to help "bridge the gap between education and work".

We attempt to do this by helping students develop an understanding of the economic process and the role of work in the life of man (and woman); and, further, by explaining how young people can enhance their future employability, productivity, earnings, and work satisfaction by investing in the development of their own knowledge, skills, motivation, and behavior patterns.

This is not a standard economics course in the sense of being a comprehensive course in "Social Economics" or "Consumer Economics". The focus is clearly on man and manpower (human resources) in the American economy, now and in the future.

* * *

In preparing this new course, we have kept two things in mind. First, our economy is changing. The changes are fundamental, the rate of change is rapid and speeding up every year, and the changes will create both problems and opportunities for Americans in the 1970's and beyond. Second, young people can do a better job of preparing for the future -- for full participation in the economic life of our nation -- if they are given an opportunity to learn more about the economy, its changing technology, and the increasing importance that human resources will have in the future.

Economic affairs have an important place in our lives. But money, goods, and work are not necessarily the most important things in life. Several units in this course are designed to help young people explore the broader economic and social world, and define the future role of work in their lives. Our hope is that education and work, instead of being a burden and bore, will bring a larger measure of personal satisfaction and self-fulfillment to the men and women coming of age in the 1970's and 1980's. A strong note of humanism is combined with relevant economic analysis throughout these materials, focusing on questions of values and institutional change. The intellectual orientation is multi-disciplinary in the tradition of such writers as C. E. Ayres, Erich Fromm, John Gardner, Kenneth Boulding, Gunnar Myrdal, John Kenneth Galbraith, Paul Goodman, and Seymour Wolfbein (although none of them should be held responsible for anything contained in this course!)

The course consists of 75 separate lessons averaging four pages in length. Each lesson begins with a concise Abstract outlining the central topic or theme to be studied. The function of this introductory paragraph (which is set off from the body of the lesson by a row of asterisks) is to focus the student's attention on key ideas and facts that will be developed in the lesson, and also to indicate why an understanding of the material can be useful to the student. Next comes the main Text of the lesson, typically including Questions to be answered in writing or class discussion by students. Statistical Data are provided in charts, tables, and the text itself to enable the student to test assertions or conclusions against significant empirical facts. This generous use of data is also designed to develop "statistical literacy". At the close of each lesson is a summary paragraph called Today's Lesson in Brief, which recapitulates and emphasizes the most essential understandings that students should have learned from the lesson.

Visual illustrations are used to enhance attractiveness and interest and to illustrate important concepts and processes. The captions that appear beneath some of these illustrations are designed to stimulate thought and discussion; interpretations and comments are intended to invite student reactions.

* * *

We have deliberately included in these lessons more concepts and information than students will learn and remember. Much of this content can be regarded as "enrichment" material that supplements the basic concepts, facts, information, and analysis identified in the abstract and summarized in Today's Lesson in Brief. Keep in mind that this course is designed to create student awareness of significant forces at work in our economic and social world, and to stimulate inquiry, discussion, and discovery. The lessons provide material for economic and occupational exploration with a focus on manpower development. Student understanding and retention of all the information and analysis presented or suggested in the lessons should not be expected.

Some of the lessons are more difficult than others; and many are appropriate for study by mature men and women: senior high school and college students and over-21 adults. Our assumption is that teen-age students are becoming mature men and women and will benefit greatly from a study of the economic, social, and psychological topics included in this course. The course was designed experimentally with eighth, ninth, and tenth graders in mind. Initial testing of the instructional materials took place by means of a one-semester course offered in eight Ohio schools during the fall semester of the 1967-68 school year. Some of the materials have also been used experimentally with college students and with adults.

It should be emphasized that, although the lessons are carefully structured, the course is <u>not</u> designed to teach itself. It is not a self-study course. The teacher must play an active role in stimulating and guiding class discussion and providing concrete examples and illustrations based on real-world experience. Students can also learn a great deal from hearing views expressed by their classmates. Well-prepared and imaginative teachers can adapt the course materials to meet the special needs of their own students.

* * *

At the end of each lesson is a signature code (in smaller type) that identifies the authors and publishers and gives the number of the lesson (#1-#75). A separate Teachers Manual provides supplementary information for each lesson, including suggested readings and references and answers to questions appearing in the lessons.

March 1968

ROBERT L. DARCY
PHILLIP E. POWELL

* * * * * *

For Tim, Kathleen, Roberta, Laura, Trish, Julie, and 60 million other young Americans who will come of age during the 1970's and 1980's.

## ACKNOWLEDGMENTS

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RLD/PEP

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MANPOWER & ECONOMIC EDUCATION: Opportunities in American Economic Life. By ROBERT L. DARCY and PHILLIP E. POWELL. Published by Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. April, 1968.

# Education and Work: A Means of Discovering Yourself

Your education and work experiences can help you learn more about yourself and the goals you want to achieve in life. Economic and manpower information can be useful to you in planning a career. Understanding how our economy operates--and the role that people play in economic life--will be valuable to you in obtaining your personal goals.

* * * * * * * * * *

The case studies that follow are true. They involve real people and illustrate some of the problems and opportunities that you may be faced with in the next few years. As you read these case studies, ask yourself what each of these people did or did not do that created the situation in which they found themselves.

## CASE #1 "No Love for the Iron Horse"

"In 1940 I heard they were hiring people at the automobile assembly plant. I figured I'd get a job and then, with the electrician experience I got in vocational school, I could work my way up to a good job. The idea of making automobiles sounded like something pretty important. Lucky for me, I got a job and was made a spot welder. There wasn't much to the job itself. I picked it up in about a week. Later I was drafted into the Army. When I came back in 1946, I tried to get into the Maintenance Department as an electrician, but there was no opening. So I went back to the assembly line -- we call it the 'iron horse'. They made me a welder again, and that's what I've been doing ever since.

"My job is to weld the hood to its metal underbody. I take a job off the bench, put it in place, and weld the parts together. The job is all made up, and the welds are made in certain places along the metal. Exactly twenty-five spots. The line runs according to schedule. Takes me one minute and fifty-two seconds for each job. The cars differ, but the job is practically the same thing every time. Finish one car and then have another one staring me in the face.

"I don't like to work on the assembly line -- no man likes to work on a moving line. You can't beat the machine. Sure, maybe I can keep it up for an hour, but it's rugged doing it eight hours a day, every day in the week all year long.

"When I'm working there is not much chance to get a breather. Sometimes the line breaks down. When it does we all yell 'Whoopee!' As long as the line keeps moving I've got to keep up with it. On a few jobs I

know, some fellows can work up the line, then coast. Most jobs you can't do that. If I get ahead maybe ten seconds, the next model has more welds to it, so it takes ten seconds extra. You can't win. You're always behind.

"I like a job where you feel like you're accomplishing something and doing it right. When everything's laid out for you and the parts are all alike, there's not much you can accomplish. The big thing is the steady push of the conveyer -- a big machine that I can't control.

"It's hard to feel that you're ever doing a good quality job. There's a constant push, at high speed. You may improve after you've done a thing over and over again, but you never reach a point where you can stand back and say, 'Boy, I done that one good. That's one car that got built right.' If I could do my best I'd get some satisfaction out of working, but I can't do as good work as I know I can do."

Questions

1. What kinds of economic activity are described in this case?
2. Why do you think this worker feels the way he does toward his job?
3. How do you think you would feel if you were a worker on the 'iron horse' assembly line?

* * *

CASE #2 "The Dropout Who Came Back"

"Joe Sorrentino has 25 scars on his hands to prove that he is a street fighter. By the time he was 20, he had flunked out of high school four times, had been booted out of the Marines, and had lost 30 jobs. The second oldest of seven children, Joe always wanted to be an 'achiever', and in his neighborhood an achiever had to be handy with his fists. A veteran of more than 100 rumbles, Joe was put on probation by a juvenile court after one particularly bloody street fight. When he was in his first year of probation, he flunked out of high school. Not long after he enrolled in another high school at night -- he failed there also. In a third try at high school he didn't last a semester.

"At 14, Joe had begun trying his hand at various jobs, achieving a record for failing which was 'better' than even his school career. On his first day of work at a bleach factory, he attempted to carry 10 gallons of bleach to a truck he was loading and dropped all 10. Joe later worked in a sweater factory, where he had the embarrassing experience of being awakened from a nap by the President of the company. Another job opportunity for Joe came through a furniture company's ad in the newspaper which read: 'Want ambitious young man who seeks responsibility.' After a month of aligning wheels of teacarts, he got tired of responsibility.

"Joe enlisted in the Marines when he turned 18 but could not stand the discipline, and rebelled. He fought with recruits, rioted in the mess hall, and tried to run away. Judged an 'incorrigible' by the Marines, he

was sent packing with a General Discharge. Back home, he was a hero to his old street-gang buddies. But within himself, Joe felt ashamed. At 20, he came to realize that his only chance for a better life was through education. So he went back to high school, for the fifth time, at night, working days in a supermarket. After two years, he graduated with the highest average in the night school's history.

"Despite only fair results on college entrance exams, his grades got him admitted to the University of California. At first, Joe felt he had nothing in common with the college youths who talked about summer vacation and beach parties -- things he knew nothing about. But he stuck it out and in his senior year, was elected president of the student body. After graduating with honors, Joe went back into the Marine Corps for two years, feeling that he had to make up for his past record. He did. This time he became a platoon leader, highest scorer in athletic competition, and changed his General Discharge to an Honorable one.

"In June of last year, 30-year-old Joe Sorrentino was valedictorian at Harvard Law School. Joe has received several offers to work for major U. S. law firms. Instead, he wants to serve a term as an assistant U. S. or State attorney in California."

Questions

1. Identify some of the attitudes and values that Joe had before he finished high school, and compare them with his later outlook on life.
2. What can we learn from Joe's case about job opportunities and the economic rewards that are available in our economic system?

* * *

CASE #3 "Skill and Satisfaction"

"I'm a die designer. We draw up the prints when somebody has a bright idea for a new die. Dies are tools that are used in the plant for shaping material for machine production. They come around to the planner and ask him whether or not we should work on it. They then give it to us and we have to design a die that will compete with one that they might have had designed outside the firm.

"I used to make dies, that's how I got started. I came to XYZ Corporation for my apprenticeship right out of high school. I had a friend whose father was a supervisor and this fellow started in here. In those days employment was tight and it wasn't easy to get a job, but I came in after my friend did. He told me about it and managed to get me in. But I wasn't doing tool and die work then. They started me on the assembly line. I worked on the line nights. But after I was in the plant for a while I looked around and I thought that I'd like to go into die work.

"You'd walk into the die shop and it was always so neat and clean. They clean the machines up every weekend. The floors were always clean. Well, one of the supervisors thought I could learn the work so he took me on as an apprentice. I had to take a cut in pay but it was worthwhile.

So I started at the bottom. Along with your work on the job you were supposed to go to school at night. We started there by taking what they called a five-year course. I finished it up in 2800 hours. That meant some going. They taught us all that an engineer learns, but from a practical standpoint.

"I'm always trying to do the best job I can. XYZ is my company. I'm going to stick with them until they cross me up. Until now they've been very good to me. If the work I do doesn't satisfy them, well, that's just too bad. I always do the best work I can.

"When I got back from the Army after the war I thought I should be in a higher position. I never said anything about it but one day the boss called me into his office and he asked me if I wanted to be a designer. I had never been any great shakes at drawing in school but I figured I'd have a go at it. Well, that's what I'm doing today and I'm one of eight in the whole plant. What I draw and design in eight hours makes enough work to keep production men busy for fifty or sixty hours.

"The engineers in our firm who are college graduates have to come to me to ask questions. I won't take anything away from them, they're smart. They know all about stresses and strains but when they want something done they have to come to me. That's something I'm very proud of."

Questions

1. How would you describe this worker's attitude toward his job? Toward life?
2. Do you think this worker has achieved success? Why?

* * *

Today's lesson, and many others in this course, will help you think about your place in the manpower market and the economic world. By providing you with economic information and asking some key questions, we hope that you will become interested in learning about the changing economy, the role that work plays in man's life, and the relationship between economic life and human development.

* * * * * * * * * *

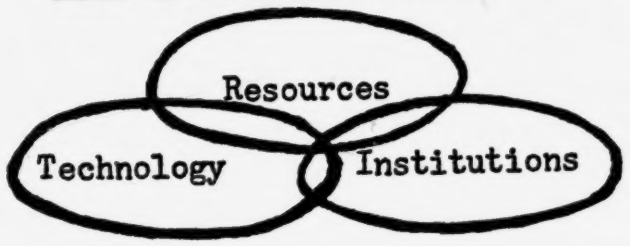
Today's Lesson in Brief

Jobs and education can be a means of understanding yourself and developing your human capabilities. Knowing how our economic system functions can help you understand an important part of your environment -- modern technology and the larger social world in which you live. This study of economics and work should prove to be a useful tool to you in achieving your life goals. Your chances of finding meaningful employment and building a life of purpose and fulfillment will be better if you prepare yourself now for tomorrow's opportunities.



ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/M1/#1

## What Is Economics All About?




ECONOMICS is the study of how society organizes to develop and to use its productive resources (manpower, capital goods, and natural resources) to satisfy human wants. Economics is concerned, therefore, with RESOURCES, with TECHNOLOGY and with social INSTITUTIONS -- and how these three sets of forces interact on each other to determine how well off a society is in terms of the goods and services that it has. Studying economics can benefit you personally because economic understanding helps you become a more effective producer, consumer, and citizen.

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"The time has come, the Walrus said, to speak of many things;
Of shoes, and ships, and sealing wax, of cabbages, and kings."

--from "The Walrus and the Carpenter" by Lewis Carroll.

Lewis Carroll's verse gives us a definition of "economics", and it's not a bad definition. It suggests that economics is concerned with all sorts of things -- clothing, transportation, business supplies, food, and government. We could, of course, add to the list, almost without limit; because economics is concerned with a very large part of the life of man. Economics has been called the study of "man in the everyday business of life" and the study of "how man makes his living". Economics includes the study of money, business, personal finance, the stock market, farming, labor unions, profits, taxes, department store sales, and more. But what is the basic subject matter of economics -- the theme that puts all of these specific subjects under the heading of economics?

> ECONOMICS is the study of how SOCIETY organizes to develop and to use its productive RESOURCES to satisfy human wants.

(And economists are the people who study and work in the field of economics. Economists work as teachers in colleges and universities, and they do research and other work for business, government, labor unions, and other groups.)

What does this definition of economics really mean? And why is economic understanding important for you?

First of all, resources are those things that can be used to produce goods and services. Goods are material things that can be used to satisfy wants or to help produce other things. A hamburger sandwich is a "good"; a TV set is a "good"; a bulldozer is a "good". Services are activities that satisfy wants, such as a haircut you get in the barber shop, having your tooth pulled by the dentist, your minister's church sermon on Sunday morning. These terms, "goods" and "services" are important; and we'll be using them throughout the course. They are part of the technical language of economics.

Generally, economists divide all the things that can be used in production into three groups: labor, capital, and natural resources.

LABOR, or MANPOWER, includes all human effort (work) used in production -- physical effort, mental effort, and any other kind of effort you might think of. Labor is what HUMAN RESOURCES contribute to production and includes digging ditches, operating machines in a factory, pumping gasoline at the corner service station, and supervising the stock clerks and checkers in a big supermarket.

Labor, or manpower, is the central focus of this course. Because labor is the only human resources it is very special, and we devote special attention to its study.

CAPITAL includes all the tools and equipment used in production. We'll use this term to mean capital goods, although sometimes people use the word when they really mean "money". The important thing to remember about capital goods is that they are produced by man, and are used in further production rather than for satisfying people's wants directly. Examples include a carpenter's hammer, farm tractor, the Brooklyn Bridge, and your school building, books, and equipment.

NATURAL RESOURCES include land, minerals, rivers and lakes -- all the things that are available in nature and can be used in production. Sometimes the term "land" is used for this type of resource; and this may seem strange since it includes such resources as water (for river barges; and for generating hydroelectric power), and oil reserves still under the ground.

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One of the most important principles of economics is that RESOURCES ARE DETERMINED BY TECHNOLOGY.

Whether something can be used in production (usefulness is what makes it a resource) depends on whether people know how to use it, and have the necessary skills and the equipment to use it. (Back in the 1930's, there was a big mining company in Colorado that was producing molybdenum -- a metal similar to chromium -- and throwing away another substance that happened to be found in the same rock. The substance wasn't valuable as a productive resource because industry had no important use for it. In the 1940's, however, a scientific and technological breakthrough sent the

miners digging frantically to recover the "unwanted substance". It was uranium ore and scientists had found a use for it in producing atomic energy.)

TECHNOLOGY refers to our skills and knowledge of how to make and use tools. Technology is one of the most important forces at work in the economy. It is the chief cause of economic progress and the basic reason for the high productivity of the American economy. Much more will be said about technology (and its cousins, "automation" and "cybernation") later in the course.

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INSTITUTIONS are patterns of social organization and behavior. And economic institutions are the behavior patterns that influence the way we develop and use resources.

Institutions are the "coordinating systems" of our economy. They are the methods and organizations (and traditions) that control the use of resources. The wage system for example, is an institution ("invented" during the Middle Ages) for having men and women exchange some of their time and effort for money -- so they can then exchange the money for goods and services. Another institution is money itself -- which is really not so much a "thing" as it is a system of behavior. We all agree to accept pieces of paper in exchange for services or goods, even though the pieces of paper have no value in themselves. They are valuable for what they can buy, and this depends on the institution of market exchange.

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The heavy emphasis that economics put on institutions is perfectly natural, since economics is a SOCIAL SCIENCE. It's social because it is concerned chiefly with how groups of people behave. Economics is a science because it makes use of the scientific method in testing its theories by making predictions and checking them carefully against the facts. You will benefit personally from a better understanding of our economy because it will help you become a better citizen, a wiser consumer, and a more successful income-earner. And society can benefit from your improved economic understanding and behavior.

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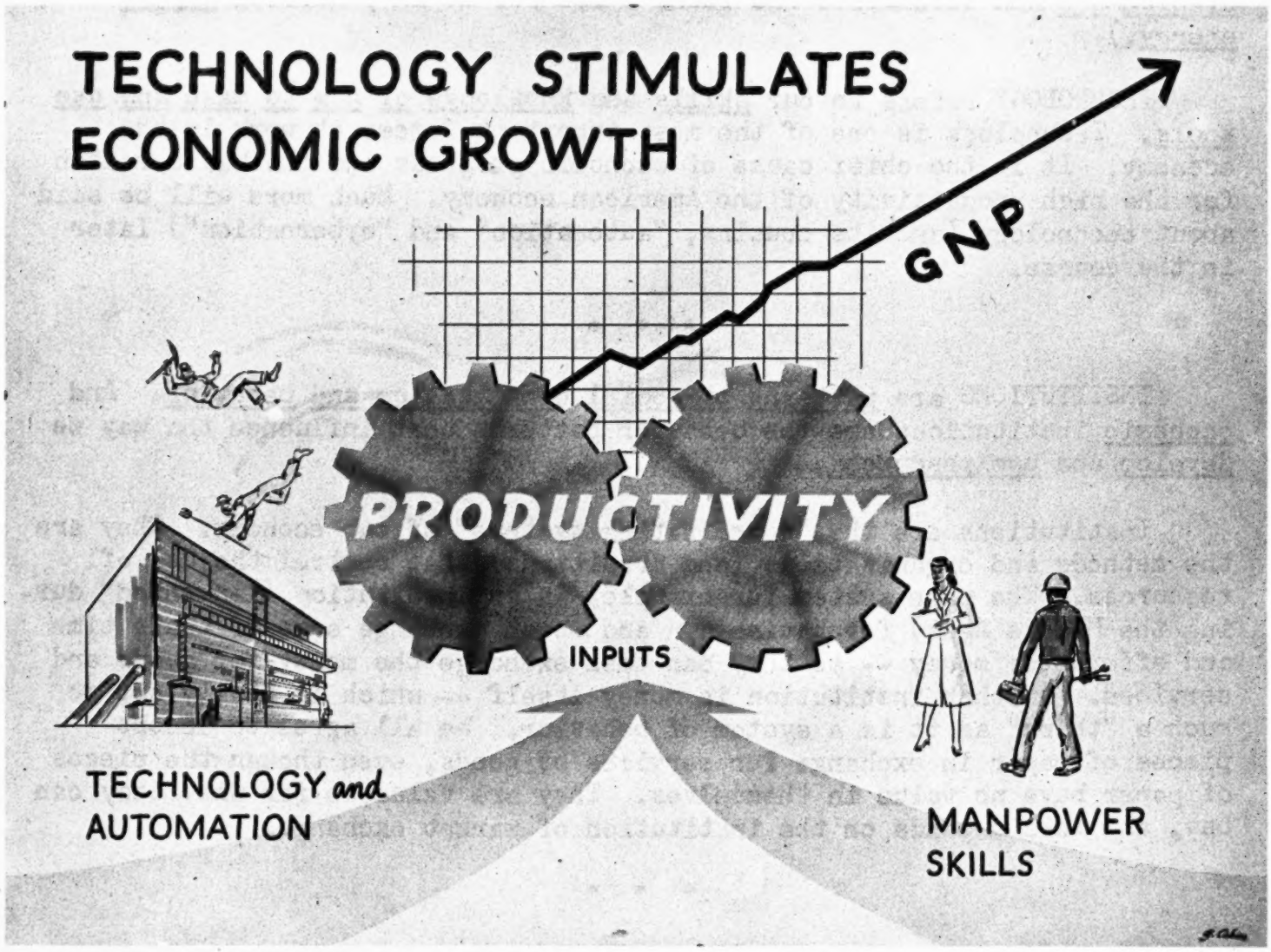
## Today's Lesson in Brief

We defined ECONOMICS as the study of how society organizes to develop and use productive resources to satisfy human wants. It is a SOCIAL SCIENCE that focuses attention on RESOURCES (labor, capital, and natural resources), TECHNOLOGY (knowledge and skills) and INSTITUTIONS (social organizations).




Technology and resources operate within a framework of institutions. When these three sets of forces -- Technology, Resources, and Institutions -- all work together efficiently, they stimulate economic growth. Human resources with improved manpower skills combine with changing technology to increase productivity and generate economic growth.

Economic growth provides more and better goods and services and higher levels of living. But in the process of economic growth and change, some workers find their jobs being eliminated. This creates employment and income problems and makes it necessary for us to adjust and improve our economic institutions.

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## What Are the Three Basic Problems Facing Every Economic System?

Every economic system -- each and every human society -- is faced with three basic questions: (1) What should be the TOTAL LEVEL of production? (2) What particular KINDS of goods and services should be produced? and (3) How should the total income of the society be SHARED among its individual members? These three basic problems have to be solved by the U. S. economy, the Russian economy, the Eskimo people living in the Arctic, and by every human society everywhere in the world.

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When we speak of an ECONOMIC SYSTEM (or "an economy") we mean simply the way that a society of people is organized to use its resources. The American economy is the total economic system of the United States -- including all of its Institutions, Technology, and Resources. Later, we will describe in detail some important features of our economic system. Now, however, we turn to the question of what an economic system must do -- the functions that every economic system must perform.

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Every economic system, regardless of whether it is the Eskimo economy of the Arctic or the market economy of the United States, is faced with three basic questions:

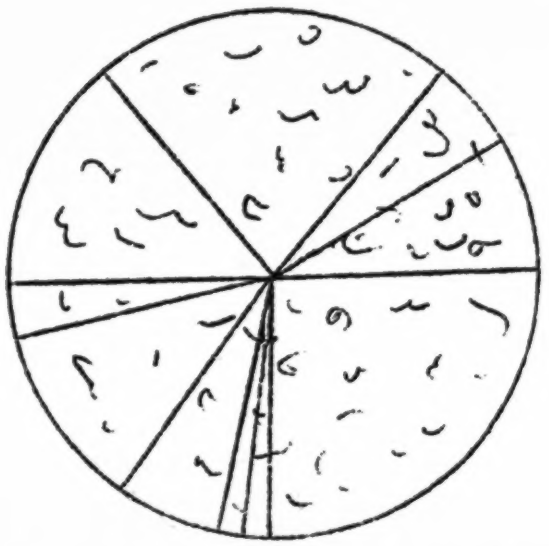
1-- What should be the TOTAL LEVEL OF PRODUCTION? How much is to be produced, in total? How big will the nation's "economic pie" be, in total? The answer to this question carries with it the answers to some related questions. For example, when we decide on the total quantity of goods and services to produce, we are also deciding on whether to make full use of the economy's available resources. Setting the total output, therefore, involves deciding on the overall level of economic activity for the whole system.

2-- What particular KINDS OF GOODS AND SERVICES should be produced? Given the overall size of the economic pie, what is its composition? (If it's a pizza pie, and it's the giant 20" size, the next question is: What's in it? How much cheese, tomato sauce, sausage, mushrooms? What mixture of different things?) The nation's output can be made up of "guns and butter" (economists use these examples to represent in a simple way the division between military goods and civilian goods); or

capital goods and consumer goods; or gadgets and plain necessities. The actual composition of output in the real world, of course, is far more complex.

3-- How is the TOTAL INCOME of the society to be SHARED among its individual members? That is, once the goods are produced, the question comes up: who gets how much of what? How is the nation's economic pie going to be sliced? How is <u>income</u> to be <u>distributed</u>?

Chart I: <u>THE NATION'S ECONOMIC PIE</u>



-- The overall size (How much?)

-- The composition (What?)

-- The distribution (For whom?)

These three questions will <u>always</u> be answered, one way or another, through the institutions that make up the economy. The problems will be solved, more or less satisfactorily. The actual patterns of production and income distribution will always be worked out in some manner.

The people that make up the economic society may <u>like</u> the way these problems are solved, or may <u>dislike</u> the answers, depending on whether the outcomes are consistent with the goals and aspirations of the people. (More will be said about economic goals in a future lesson.) If the people like the way their economic system answers the three basic questions, it can be said that the system is performing well. To the extent that they don't approve of the actual <u>level</u> of production, the <u>kinds</u> of goods and services that are produced, or the way income is <u>shared</u>, they can attempt to change the resources, technology, and especially the <u>institutions</u> in such a way as to get results more to their liking.

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The economic system of the United States of America is basically a <u>private-enterprise</u> system, where individuals and groups of people own most of the productive resources and make decisions as to how they should be used. We have private property rights concerning natural resources and capital goods.

The Union of Soviet Socialist Republics (Russia's official name) is a socialist or "communist" economy, where most of the natural resources and capital goods are owned and controlled by government.

The United Kingdom of Great Britain and Northern Ireland (usually called "Britain" or the "U.K.") has an economic system that is often described as "democratic socialism" -- with some of the basic productive resources owned and operated by the government. But this birthplace of industrial capitalism is still largely a private-enterprise economy. And the same is true of France, Germany, and Japan, among other countries.

In some ways, the economic systems of the U.S., Russia, and Britain are very much alike. They all make use of money and prices, methods of production are technologically advanced, they use billions of dollars worth of capital equipment, and they are all highly productive -- among the richest nations in the world.

But their economies also differ -- in the way they are organized to use (and to develop) their resources. One of the most interesting subjects in economics is the study of "Comparative Economic Systems", which focuses attention on how these different types of economies answer the three basic questions of How Much, What, and For Whom to Produce.

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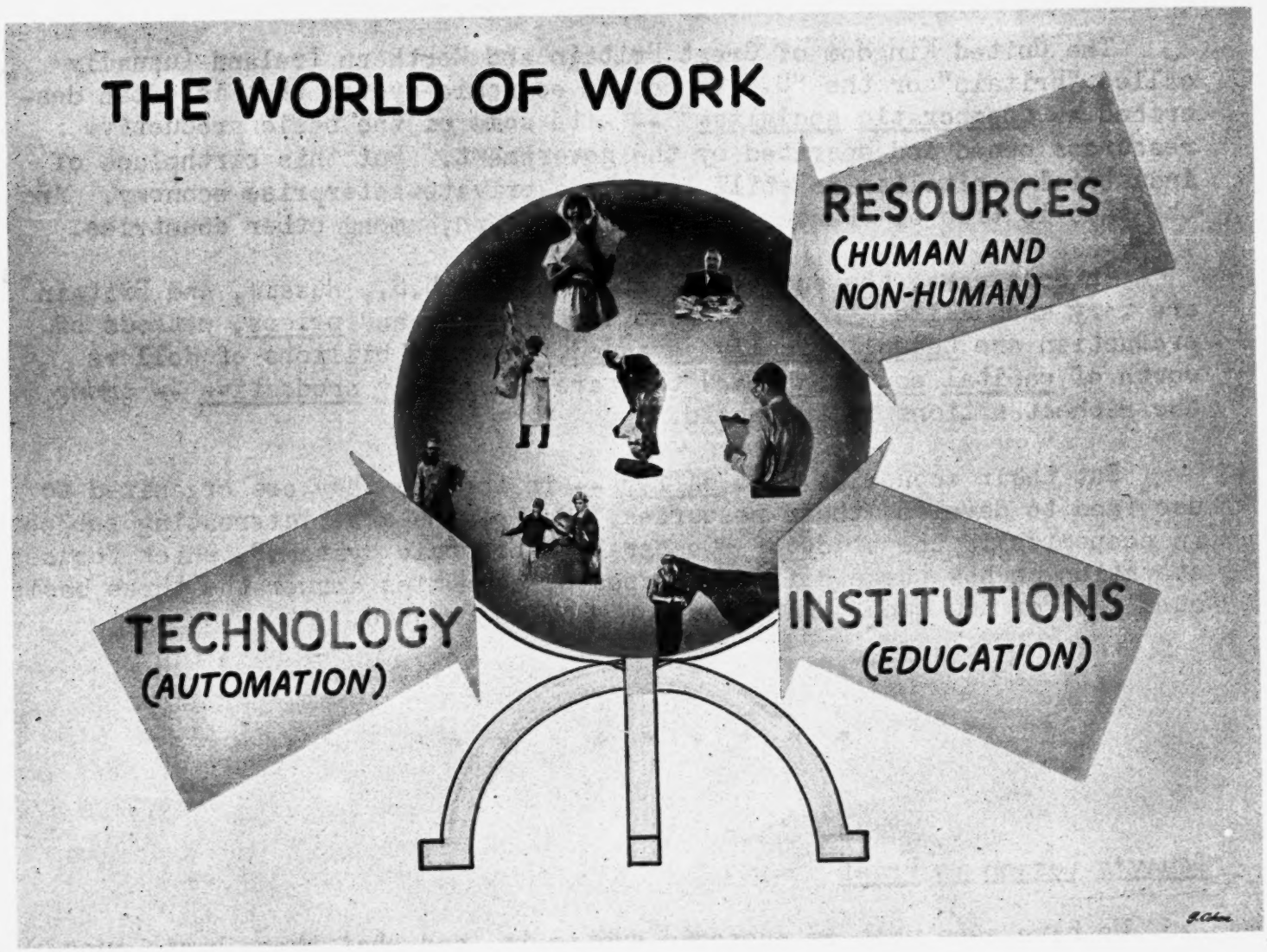
## Today's Lesson in Brief

We have seen what an economic system is, and what three basic questions every economic system must answer: (1) How much to produce? (2) What kinds of goods and services to produce? and (3) How to share the total output among members of the society? The U. S., Russia, and Britain were listed to illustrate how different types of economies answer the three basic questions.




Resources, Technology, and Institutions influence the world of work. Human resources are improved by education and training. Automation and other forms of advanced technology make it possible for us to use our natural resources more efficiently and to create new types of capital equipment. The economic world is constantly changing, and these changes shape our new environment for work.

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## Economic Institutions

An "institution" is an established pattern of group activity -- a set way of doing things. Sometimes there are formal organizations like schools and civil courts that provide a structure for carrying on these activities (education and law-enforcement). But an institution can exist without a formal organization to go along with it. Economic institutions are the habits, procedures, and established ways that a group of people (or a nation) follows in using productive resources. Some important economic institutions are the labor market, the money and banking system, private property rights, progressive income taxes, labor unions, and the business system. Institutions change over time, growing and adjusting gradually to changes in technology and production.

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Economics is a study of three sets of forces -- Resources, Technology, and Institutions -- and how they all interact on one another. The quantity and quality of labor, capital, and natural resources along with technology will always set the upper limit to what a nation can produce. However, it is the society's institutions that will determine the actual level and pattern of production by determining how the resources are used. The important thing to remember about institutions is that they depend on the beliefs and behavior of people. Most scholars agree that there are no "natural" institutions; only man-made institutions.

John Stuart Mill, a famous English philosopher and economist of the middle 1800's, pointed out the importance of institutions in determining the distribution of wealth and the sharing of income.

"The laws and conditions of the production of wealth partake of the character of physical truths," he wrote in Principles of Political Economy. "There is nothing optional or arbitrary in them .... It is not so with the Distribution of Wealth. That is a matter of human institution solely. The things once there, mankind individually or collectively can do with them as they like. They can place them at the disposal of whomsoever they please, and on whatever terms. Further, .... any disposal whatever of them can only take place by the consent of society .... Even what a person has produced by his individual toil, unaided by anyone, he cannot keep, unless by the permission of society. Not only can society take it from him, but individuals could and would take it from him, if society only remained passive .... The distribution of wealth, therefore, depends on the laws and customs of society. The rules by which it is determined are what

the opinions and feelings of the ruling portion of the community make them, and are very different in different ages and countries; and might be still more different, if mankind so chose."

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Question: How do various kinds of economic institutions such as income taxes, and Unemployment Compensation directly influence the distribution of income and indirectly influence the use of productive resources in the United States today?

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The economies of different countries, such as the United States and Soviet Russia may be very much alike in their resources and technology -- as indeed they are. But when you look at the economic institutions of the two countries, important differences can be seen. For example, private property is a key institution of the American economy. According to this institution, individuals and groups of individuals are allowed and encouraged to own capital and natural resources and use the "means of production" to further their own economic self-interest. (Property is not a "thing" like a factory building or oil well; it is a bundle of legal rights concerning the use of economic resources.)

In Russia, the institution of private property is outlawed, with certain exceptions. Basically, the means of production -- capital and natural resources -- are not owned by individuals and private organizations such as business corporations. The means of production are owned collectively by the government. Note that capital (man-made goods used in production) is found both in the capitalistic U.S.A. and the socialistic U.S.S.R. The big difference between capitalism and socialism is an institutional difference, centering around how we are organized to use our capital goods and other resources.

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Here is another example of an economic institution. In the U. S. economy, the prices of most goods and services are set by market forces -- supply and demand, or in some cases decisions made by business corporations and labor unions. (Only in wartime are prices generally set and controlled by the government.) But in Russia, prices are set by government planners practically all the time, and consumers have to adjust their buying decisions to whatever these prices happen to be. This is another institutional difference between the two systems.

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One final example of an economic institution that we want to discuss is "acquisitive behavior". This is a fancy name for the desire to "get ahead in the world". It is the profit motive. Many writers and businessmen speak of this desire to make money and build up a stockpile of material goods as "the American dream". In certain other countries and in other periods of history, people are not motivated in their economic lives by this acquisitive drive. A typical villager in India, for example, would not dream of changing his job or where he lives in order to increase his wages by 15%. Perhaps you have heard the story of the South Sea islanders who worked for the U. S. Air Force during World War II building airfields. They worked eight or 10 hours a day for as little as 25 cents per day. When the Air Force raised their pay to 50 cents a day out of generosity, many of the natives decided to work only half a day. Others worked three days, then took the rest of the week off. (They went fishing, or just loafed.) Earning as much as they could get -- typical American behavior -- was not their habitual way of behaving. Acquisitive behavior was not an institution of their economic system as it is in the U.S.A.

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Check the following list of economic institutions, and consider three things about each institution: 1) where the institution came from; 2) what function it serves; and 3) whether it ought to be changed.

Some present-day American Economic institutions:

The 40-hour work week
Ohio State Employment Service
Radio and TV commercials
Tax-exempt status of church property
United Auto Workers, AFL-CIO
Inheritance of wealth

Institutions have their roots in the past. Society inherits most of its institutions form earlier times. Because institutions come to us from the past, many people feel that they shouldn't be allowed to change. Before the 1930's it was argued that we shouldn't have a Social Security system to provide government pensions for retired workers, because we had never had one in the past. Free public education for everyone was criticized when the plan was first suggested in the early 1800's, as was universal adult suffrage -- letting all grownups vote. Labor unions and collective bargaining by workers were bitterly opposed by business, the courts, and government until the 1930's.

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Because they have their roots in the past, institutions are slow to change. But technology changes rapidly, and economic growth takes place. The problem then arises: can society adjust its economic institutions quickly and smoothly and fairly enough to keep pace with technological progress and economic growth?

For example, automation (a form of technological change) is eliminating the need for certain kinds of workers. (A couple of years ago, there was much discussion of the claim that automation was "destroying 40,000 jobs a week" in this country and the "cybernation revolution" would create mass unemployment by 1975.) What happens to the people who lose their jobs when machines take over? Sometimes they can simply go out and find a new job, using the same skills they used on the old job. But in the case of coal miners, farmers, and railroad firemen, they can't transfer their skills so easily. New institutions -- manpower development and technical training programs and temporary unemployment compensation -- may be required to meet the needs of people whose jobs and lives are disrupted by technological change and economic growth. (During the past 20 years, 75% of the jobs in coal mining were wiped out; four million jobs in agriculture disappeared; and more than half the railroad jobs vanished.)

Is automation a real problem today? Should we halt the spread of automation? Should automation be encouraged? If so, why? How can we adjust our economic institutions so that the burden of change will not rest too heavily on particular individuals and groups? As a citizen and a worker, your opinions on these questions will be important and your decisions will help influence the future development of the American economy.

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## Today's Lesson in Brief

Economic institutions are the established patterns of group behavior that influence the way we use resources. Institutions are man-made, rooted in the past, and often very slow to change, even when technology is advancing rapidly and the size and structure of the economy are radically altered. How to make wise institutional changes is one of the biggest continuing problems that society faces in a growing economy.

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## Capitalism: "The Anatomy of Free Enterprise"

The economic system of the United States is a mixture of private enterprise and government, of competition and "monopoly" power, of tradition and of the market mechanism. But even though it is a very complicated mixture of many things, it still remains basically a capitalistic system built on the foundation of private property, the profit motive, free enterprise, competition, and market prices.

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Our economic system has been called by a lot of different names: "free enterprise", "market system", "capitalism", "profit system", "price system", "private enterprise", "free competition", "mixed capitalism", and others. Each of these terms tells us something about the way our economy is organized and how it is believed to be operating. What is the correct name for our system? What kind of economy do we really have?

Of course, the answer is that we have a very complex system, and there is no "right" name for it. We can call it almost anything we choose -- any label we agree on. (Most economists would probably agree on a term like "Mixed Capitalism", or "Mixed Economy", or "Basically Private Enterprise".) But where do all the terms listed above come from? What do the words mean?

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If our economy is "mixed", you may well ask the question: "A mixture of what?". Basically, two things -- "pure capitalism" and those factors such as monopoly power and government intervention that inject "impurities" into the system. (These "impurities" are not always necessarily bad or harmful. Sometimes they are exactly what the people desire and may have very good effects on the economy.) First, let's consider the anatomy of "pure capitalism" or the ideal "free enterprise system".

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Pure capitalism has five important features. That is, there are five important institutions of a capitalistic system. (These institutions were first explained back in 1776 when Adam Smith, a British philosopher and

economist, published his famous book, The Wealth of Nations.) The basic institutions of capitalism are:

-- Private property
-- The profit motive
-- Free enterprise
-- Competition
-- Prices and wages determined by the free market

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PRIVATE PROPERTY is the basic institution of capitalism. It is the core and the foundation of the whole system. Without the legal institution of private property, pure capitalism could not exist. What is meant by "private property"? It is simply the legal right to own capital goods and natural resources, and the right to use them and dispose of them any way the owner wants to. Private property is not a thing, like a coal mine. It is "a bundle of legal rights" that concern how the coal mine is used. Because we have the institution of private property in the United States, individuals and groups of individuals are allowed (and encouraged) to own coal mines (and other resources) and decide how they should be used in production.

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How should coal mines be used, under a system of private property? This is where the second feature of pure capitalism comes in: THE PROFIT MOTIVE. In a capitalistic system, with the institution of private property, resources are used in such a way as to make the largest possible profits for the owners. The profit motive is the driving force that gives incentives to use resources in production, and use them efficiently. Of course, not only the owners of resources but also workers (and consumers) are motivated to do as well as they can in the economy.

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FREE ENTERPRISE is another feature of pure capitalism. This means that an individual, or a group of individuals, is free to start his own business. It is a "natural" outcome of the legal right of private property and the profit motive in the sense that setting up a business is a good way to take advantage of profit opportunities in the economy.

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A fourth characteristic of pure capitalism is COMPETITION. This was emphasized by Adam Smith in The Wealth of Nations. Without real competition in the market, businessmen might take advantage of consumers -- charging high prices and selling shoddy merchandise. Without competiton among sellers, consumers would have no freedom of choice and would have to take whatever was available. Competition is a necessary feature of capitalism because it forces producers to be efficient, to charge prices that are near to the costs of production, and to guarantee that consumers have real freedom of choice.

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Finally, under pure capitalism PRICES and WAGES are determined by supply and demand forces at work in free, competitive markets. Large numbers of independent buyers and sellers come together in free markets, and prices are automatically set. Whenever prices are set by monopolistic businesses or labor unions or through government regulation -- as they sometimes are in the real world -- the system is not pure capitalism.

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Is the American economy in the 1960's "pure capitalism"? To answer the question, check each of the five features listed above. Do we have private property? Are the American people driven by the profit motive? Is there free enterprise in the sense that people can start up any kind of business they want? Is there competition in the market for consumer goods? -- In the market for resources? Finally, how are prices set? -- By supply and demand forces operating in competitive markets? -- Or by monopolistic businesses and by government regulations?

* * *

Your answers probably suggested at least three reasons why the U.S. economy today is not pure capitalism. First, there are some monopolistic (non-competitive) markets. Big corporations and labor unions do have some market power to influence the prices of goods and services. Second, government does step in and regulate prices and production in certain areas like farming, public utilities, and sometimes even the steel industry and railroads. Finally, people aren't always well-informed; and they don't always act "rationally". When consumers and other economic decision-makers fail to act rationally, the system won't work according to "the ideal". If consumers, and workers, and business firms aren't well-informed, rational, competitive, and if they aren't willing to make rapid adjustments in order to increase profits and incomes, then the system of pure capitalism breaks down.

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Actually, pure capitalism has never really existed -- except in people's minds (and in economics textbooks). But something very close to it did exist in Britain, the U. S., and other European and English-speaking countries of the world during the 1800's and early 1900's. Today, however, most countries of the world have a "mixed economy". Our economy probably has more features of pure capitalism than any other nation in the world. Our system is growing and changing. Fifty years from now, we can predict that it will be somewhat different from what it is now. But today, and probably 50 years from today, the name "mixed capitalism" fits our economy pretty well. To understand the anatomy and functioning of the American economy requires a basic understanding of the capitalistic model.

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Today's Lesson in Brief

The economic system of the United States is a mixture of pure capitalism and a set of other forces such as monopoly power, government intervention, and "imperfect" market behavior. Key features of pure capitalism are: Private Property; the Profit Motive; Free Enterprise; Competition; and Free Market Prices.

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## The Circular Flow of Economic Activity

In every economic system, decisions have to be made concerning the amounts and kinds of goods and services that are produced. Who makes these decisions in the U. S. economy, and how are they made? For the most part, economic decisions are made by Consumers, Business Firms, and Owners of Productive Resources, (and by Government). The decisions are linked together and coordinated by flows of MONEY and flows of GOODS & SERVICES in a system of MARKETS.

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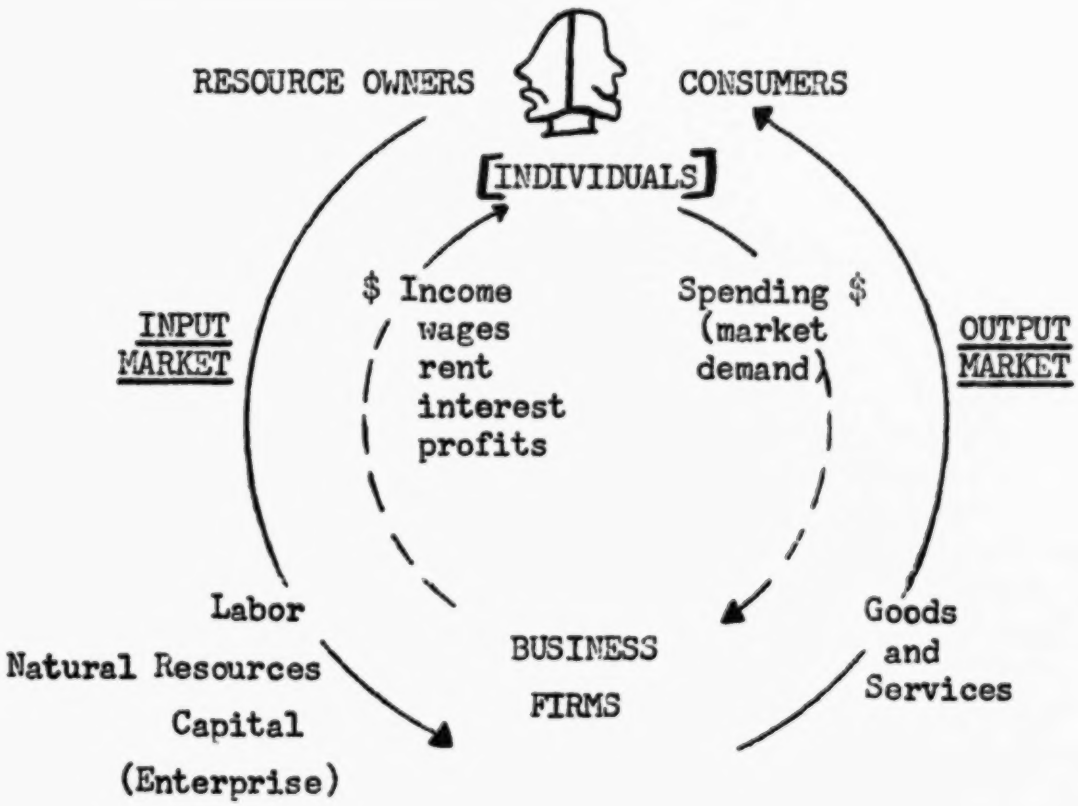
Chart I. THE CIRCULAR FLOW OF ECONOMIC ACTIVITY




Today's lesson builds on the old saying that "One picture is worth a thousand words." In this case, we're going to use one picture plus about 500 words to explain the circular flow of activity in our economy.

The diagram shown above is an economic "model". It is a simplified picture of the private sector of the economy, leaving out the role of government. This "private sector" accounts for about four-fifths of all

the goods and services produced in our economy each year. (Later we can make the model more realistic -- and also more complicated -- by putting government in.)

Let's make crystal clear what it is that we are showing with this diagram. First, we list the three units that make important economic decisions in the private (non-government) part of our economic life.

These decision-making units are (1) Consumer Households, (2) Business Firms, and (3) Resource Owners.

Second, we show that in our economy there are flows of money and flows of goods and services. The flows of goods and services are influenced by money flows, because ours is a "market" economy. Goods are produced to meet market demand. (A market is where things are bought and sold.)

Third, we show some details of the INPUT MARKET. This is the market for productive resources, where labor, natural resources, and capital are sold to business firms. The money that business firms pay for these resources becomes the income of the resource owner.

Finally, we show how the OUTPUT MARKET -- where goods and services are bought and sold -- is linked to the input market.

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How do we explain that two-headed character at the top of our diagram?

The smiling face on the right-hand side represents INDIVIDUALS in their capacity as CONSUMERS. Every person in our economy is a consumer (200 million mouths to feed) and belongs to a "Consumer Household." (There are 48 million consumer households in the U. S. having two or more members, plus an additional 12 million that have only one person in it.)

Consumer households make economic decisions in the output market. They decide whether to buy particular goods or services, what quantities to buy, whether to buy from one business firm or its rival across the street. Consumers spend money to buy goods and services in order to enjoy consuming them (and that's why the face on the right is smiling.)

The face on the left shows INDIVIDUALS in their capacity as RESOURCE OWNERS. Not all individuals own productive resources, but most of the consumer households in our economy have at least one resource owner -- a person who has manpower (or labor) to exchange for money in the input market.

There are over 75 million men and women in the civilian labor force, which means there are at least 75 million resource owners. Why? Because that many people are owners of their own labor. In addition, there are people who own natural resources (such as oil wells and farmland) and people who own capital goods (factories, stores, etc.). All in all, there

are about 80 million resource owners in the U. S. economy (without double counting). Although many people really enjoy their work, we have drawn a frown on the left side of our two-headed individual to suggest that the input side of production is perhaps a little less pleasurable than consuming the output of goods and services.

When the resource that we call labor makes its services available to Business Firms (say, for 8 hours a day, five days a week, to help produce automobiles), what does labor get in return? All those people who contribute human effort (manpower) to production receive a payment that economists call "wages". This includes hourly wages, monthly salaries, sales commissions, tips, fringe benefits, and all the other direct and indirect payments for work.

Owners of natural resources who allow their land or materials to be used in production are paid something called "rent". Note that this isn't the same thing as the rent your family pays for the house or apartment you live in. That rental payment really includes the costs of labor services and capital goods (the house and its fixtures) as well as the use of land itself.

Owners of capital who allow their buildings and equipment to be used in production receive a payment called "interest". Actually, they often receive this interest for letting people use their money, which in turn is used to buy buildings and equipment.

Finally, in addition to Labor, Natural Resources, and Capital, there is a fourth "factor of production" or type of resource that sometimes is included in the circular flow model. That's "enterprise" -- the economic function of making basic policy decisions (not day-to-day supervising and managing) for a business, and bearing risk. The payment made to enterprise, when the business is successful, is called "profits".

* * *

Looking at the circular flow diagram again as a model of the economy (with government temporarily left out), we can show how money flows in one direction and goods and services in the opposite direction. Consumers spend money in the output market to buy goods and services from business firms. These expenditures are like dollar votes that give signals to business, telling them what to produce (more transistor radios, nylon sweaters, houses, cars, and technicolor movies.) The market is a communications system, with the signals given by the dollars that people spend.

When the business firms receive signals in the output market from consumer households, they can make (and change) their plans concerning what and how much to produce. And they can turn to the input market and buy the resources they need to produce the goods and services that are demanded by consumers. (Question: Can business firms ever influence consumers and the kinds of signals consumers send out in the market?)

Resource owners receive money <u>income</u> in payment for the labor, natural resources, and capital they provide. This income is available to be spent on consumer goods. Individuals take in money with the left hand as resource owners, and then spend it with the right hand as consumers. (Or, Dad earns wages in the <u>input</u> market, and Mom takes and spends it in the <u>output</u> market!)

Although buying and selling are not the most important kinds of economic behavior -- <u>production</u> is the most basic economic activity -- they are very important. The circular flow model gives us a way of picturing who it is that makes the buying and selling decisions in a market system; what effects these decisions have in guiding resources into productive use; and how goods and services are "rationed" to consumers who have the <u>willingness</u> and the <u>ability</u> to purchase them in the marketplace.

The model shows that the purpose of business is not "to satisfy human <u>wants</u>". It is to make <u>profits</u> by producing the goods and services that people demand (pay for) in the market. (<u>Question</u>: What difference does it make?)

* * * * * * * * * *

## <u>Today's Lesson in Brief</u>

About four-fifths of the economic activity of the U. S. is based on decisions made in the private (non-government) sector of the economy. There is a <u>circular flow</u> of money spent by CONSUMERS and BUSINESS FIRMS in one direction, and a corresponding flow of goods and services from RESOURCES OWNERS And BUSINESS FIRMS in the opposite direction. These flows show how the INPUT MARKET and the OUTPUT MARKET are joined together to coordinate and determine how resources are used in a basically private-enterprise economy. (The role of government is considered in a future lesson.)

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## The Division of Labor and Economic Interdependence

Centuries ago, men and women learned they could produce more and better goods and services by working together as a team rather than working alone and trying to be a "jack of all trades". Adam Smith, "the father of economics", sang the praises of the division of labor and argued that it was the best way to increase the Wealth of Nations (the title of his famous book, published in 1776). But SPECIALIZATION OF LABOR (on the basis of comparative skill advantages) not only increases total production; it also increases the economic INTERDEPENDENCE of all members of society.

* * * * * * * * * *

We saw -- in our circular flow model -- how the productive resources of labor, capital, and natural resources are combined by business firms to produce goods and services. In this way, "inputs" of manpower, machinery, and materials are converted into "outputs" of food, clothing, cars, and TV sets to satisfy the wants of millions of consumers.

Of all the resource inputs, nothing is more important to the economy than the quantity and quality of its MANPOWER. And because this human resource factor is so very significant, we will make it the focus of our attention for the next four lessons.

* * *

How important is labor, and what factors influence the productive powers of labor? Let's go back in history nearly 200 years and see how these questions were answered by the first great economist, Adam Smith.

* * *

Improvements in the "productive Powers of Labor" was the first topic that Adam Smith covered in his famous book, The Wealth of Nations, published in 1776. (This book is considered to be one of the most important ever written. The author -- Adam Smith -- was a professor of philosophy and economics from Scotland and is generally considered to be "the father of economics." Many of the theories that he explained in The Wealth of Nations are still taught to students of economics here in the United States and all over the non-communist world. The ideas of Adam Smith mean

as much to people in the English-speaking countries of the world as the ideas of Karl Marx mean to Russian and Chinese communists.)

Lesson number one that Adam Smith teaches about the causes of improvement in the productive powers of labor is that "Division of labor is the great cause" of increased productivity. The example he used was a pin factory that made ordinary straight pins, like those used in sewing and packaging clothing:

> "A workman not educated to this business, nor acquainted with the use of machinery employed in it, could scarce make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades.
>
> "One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head. To make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another. It is even a trade by itself to put them into the paper.
>
> "The important business of making a pin is, in this manner, divided into about 18 distinct operations. I have seen a small factory of this kind where 10 men were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor (and did not have the best of machinery) they could, when they exerted themselves, make among them about 12 pounds of pins in a day. There are in a pound, upwards of 4,000 pins of a middling size. Those 10 persons, therefore, could make among them upwards of 48,000 pins in a day. Each person, therefore, making a tenth part of 48,000 pins, might be considered as making 4,800 pins in a day. But if they had all worked separately and independently, they certainly could not each of them have made 20, perhaps not one pin in a day -- that is, not even a small part of what they are at present capable of performing, because of a proper division and combination of their labor on different questions." (from Adam Smith, The Wealth of Nations, Modern Library Edition, pages 4-5, with minor editorial changes.)

Smith explained why the division of labor resulted in greater production. First, being able to work at a single task helps the worker improve his skill. Second, there is a big gain by saving time that would otherwise be lost in moving from one sort of work to another. And third, division of labor makes it possible to develop and use specialized machinery that helps workers turn out great quantities of production.

* * *

Question: Can you think of an example of division of labor in your own family that improves the "productive powers of labor"?

* * *

The idea of specialization and division of labor is one of the basic principles of economics. It tells us first that we can get more total output of goods and services by using our brains to organize the job in order to save time, take advantage of each worker's skills, and benefit from the use of machinery and tools. Second, the principle of division of labor tells us that the output of the whole community and the entire nation can be increased by having individuals and business specialize in producing the goods and services that they are especially good at producing, and letting other people produce goods and services that they can produce more efficiently.

* * *

Question: Can the principles of specialization and division of labor be applied to countries as well as to individuals within a country?

* * *

In a modern society, we divide the labor and carry the principle of specialization to such extremes that sometimes a worker doesn't even know what he is producing and where it fits into the overall picture. A factory worker who tightens one bolt on a truck wheel as it moves past him on the assembly line may never even see what the finished truck looks like! But production managers have discovered that the assembly-line method is a very efficient way to organize the job and divide the labor.

* * *

Along with specialization of labor comes economic interdependence. Just as we depend on the assembly-line worker to tighten bolts so we can have trucks, he in turn depends on hundreds of other people to feed him and his family, and to provide housing, clothing, schooling, and many other goods and services.

The greater the division of labor, the greater the productivity. But more specialization means more interdependence. Consider how we depend on the farmer to plant and harvest enough crops; the electric companies to produce and transfer electric power to light our homes and keep our refrigerators running (not to mention our furnaces and kitchen ranges); the oil

companies to refine gasoline and maintain adequate supplies in thousands of service stations; and state and local government to provide educational services for our young people. An occasional crop loss, power failure, or work stoppage in a key industry helps us to realize just how dependent we are on other members of our economic society.

* * *

This high degree of INTERDEPENDENCE, which is the other side of the coin of specialization and improved productivity, is one reason why economics is such an important subject. Since we are all part of an interdependent economic system -- as producers and consumers -- we need to know more about how the system is organized, how it operates, and how our own personal decisions and behavior will affect other people, and their decisions will in turn affect our own well-being.

* * *

Question: Why does your neighbor have an important stake in your education, your economic understanding, and your choice of an occupation?

* * * * * * * * * *

## Today's Lesson in Brief

One of the most important causes of increased labor productivity (that is, the power of labor to produce goods and services, aided by capital goods and natural resources) is the division of labor. This lesson was taught by Adam Smith back in 1776. But specialization in production also causes economic interdependence. As our economy becomes more specialized, each individual and each family becomes less and less self-sufficient.

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## The Work That People Do

"I am the people, the mob, the crowd, the mass.
Do you know that all the great work of the
world is done through me?"

-- Carl Sandburg (I Am The People, The Mob)

The division of labor is carried so far in the American economy that workers today are employed on almost every type of job you could possibly think of. The United States Department of Labor has classified 36,000 jobs and nearly 500 separate occupations. Descriptions are given for work that men and women do in our economy.

* * * * * * * * * *

We have seen how specialization and the division of labor help to increase the productive powers of labor. But how is the work divided in the U. S. economy? What specific kinds of jobs do the men and women in our work force do?

There is a great variety of jobs in the American economy. There are in fact, according to the Federal government's job classification system, 479 individual occupations which have 23,000 definitions and 36,000 titles. All of these jobs contribute to our economic, social, and personal well-being. These jobs differ in many ways -- hours of work, pay, working conditions, employment requirements, location, and the size of the enterprise that employs the workers.

We'll look at the panorama of jobs in our economy so that you will have some idea of the various types of opportunities there are for employment in the American economy. The more you know about jobs the better will be your understanding of the manpower market, where employers hire workers.

The job want ads that follow on the next few pages are the type that newspapers in America carry every day. As you read these job announcements, ask yourself the following questions:

1. Which of these jobs is of interest to me? Why does it interest me?

2. If I take the course of study I'm planning on for the rest of my schooling, which of these jobs could I qualify for?

**BOY AND GIRL GRAPHIC DESIGNERS: ARE YOU TIRED OF THE CITY?**

**Let us offer you the opportunity of designing High Style collateral material and the facilities to Art Direct from beginning to end under one modern roof.**
**Send us six of your best pieces along with a brief resume. If suitable, we'll fly you to our place in the country. You'll find national accounts for your ego and a pastoral atmosphere for your peace of mind. (Check us in D & B if you just can't believe it.)**

***ALDERMAN STUDIOS, INC.***
**High Point, N.C. 27261**

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HOUSEWIVES

Part time work in sales for evening and Saturday hours. Some day hours. Immediate discount on purchases.

Apply in Person

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ASSISTANT TREASURER
Educational Service Organization

*Man with Accounting background needed to assist department head and oversee accounting department. Must be good correspondent and able to communicate with contacts in financial community. Accounting degree required, experience in College Fund Accounting desirable but not necessary. Office Midtown Manhattan. Generous fringe benefits. Salary open. Send detailed resume.*

*Box X 7442 TIMES*

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DISPATCH CLERK

Opening cn evening shift for young man, 19 to 35. Interested in future with transportation. Apply in person.

ASSOCIATED TRUCK LINES

*BEHAVIORAL SCIENTISTS*

*For Management Development*

**The Challenge: Developing managerial resources in one of several multi-divisional complexes.**
**The Program: Independent responsibility in an all-out, close-working group operation that involves**

**Managerial performance evaluation.**
**Executive selection and assessment.**
**Early identification of potential.**
**Organizational analysis and planning.**

**The Goal: Transformation of management potential into a dynamic and productive management force.**
**The Requirements: An advanced degree in psychology, five or more years combined clinical, industrial or consulting experience. Ability to use sophisticated personnel assessment techniques and behavioral principles for genuine contributions to the very highest levels of management.**
**The Atmosphere: Rewarding. With full recognition for this important function in a progressively expanding billion-dollar corporation. Positions exist at several attractive locations.**
**Please send resume, salary progress and current requirements.**

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SOLENOID VALVE SALES

Due to expanding present line of solenoid valves, large mid-west manufacturer has openings for additional sales engineers. Three or four years experience is required with a preferred background in pneumatics and hydraulics. There will be some nation-wide travel from the base operation. Company car, excellent salary and liberal employee benefit program will be available to the right men. Submit resume and salary requirement.

MACHINE REPAIR
MACHINISTS

**Full time, 2nd shift, must know Lathe, Shaper and Miller, have own tools. Shift premium, good fringes, no age limit.**

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*TRADEMARK LAWYER*

*Responsible opportunity in New York law firm for lawyer with 1-4 years trademark background.*

---

**YOUNG MEN full or part-time trainees. No experience necessary. Are you over 19 years old and over 5'6" tall, well-groomed and neat in appearance? Here's an apportunity to meet and be with a wonderful group of people, attend dances and parties, become an outstanding dancer and teacher. No experience necessary. Top salaries. Frequent increases. Apply in person, ARTHUR MURRAY STUDIOS.**

---

DINNER HOSTESS

Short evening hours. We will train you. Prefer EastSide resident. Apply in person to Mr. Tonetti, between 11 a.m. and 2 p.m.

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FURNITURE DECORATOR
and SALES PERSON

*A progressive furniture store needs the services of an outstanding sales person. Store has over 40,000 sq. ft. all on one floor. 10 yr. retirement pension plan, plus other added incentives. Store sells medium priced furniture with leading line of Ethan Allen. Replies will be held in strict confidence.*

---

DISH MACHINE OPERATOR

One day and one night. Better than average starting pay.

*PHARMACOLOGIST*

*A major effort is now being made by Union Carbide in the field of pharmaceuticals. Opportunities are now available at the Bs, MS and PhD levels with plans to continue staffing throughout 1967. Areas of interest include:*

BIOCHEMICAL PHARMACOLOGY
CARDIOVASCULAR PHARMACOLOGY
NEUROPHARMACOLOGY

*Enjoy the benefits of an industrial research affiliation in an academic environment. Your inquiry will receive prompt and confidential consideration.*

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**ACTUARIAL ASSISTANT**

**Nationally known company offers excellent opportunity to college graduate with major or minor in mathematics. Intent to study acturial science and prepare for Society of Actuaries examinations necessary. Applicant will assist actuary in rate computations, statistical studies, and mathematical analysis. This is a tremendous opportunity to immediatly assume professional responsibility and increase your stature based opon your own capabilities. Send complete resume including salary requirements.**

**Box CE-760, The Wall Street Journal**

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MEDICAL TECHNOLOGIST A.S.C.P.
Male or Female

Full time position available, salary commensurate with experience. Excellent fringe benefits. Apply to personnel office.

SUBURBAN COMMUNITY HOSPITAL

LABORERS

wanted to assist brick mason.

50 hrs. per week,

total pay approximately $120

CALL BET. 9-5 P.M.--252-2123

YOUR OWN COSMETICS BUSINESS

We have MAGIC ALOE. Less than $20.00 starts business. Unlimited earnings. No door to door selling. For free samples and color brochures, send $1.00 for postage and handling.

CARISSA COSMETICS

JANITORIAL WORK
Part Time

Applicants desired for steady work late eves. 12 p.m. to 6 a.m. Sun. through Thurs. In good health, between 21 and 50. No police record, must drive and have own car.

CITY JANITORIAL SERV. CO., INC.

GO-GO Dancers for afternoon cocktail hour.

The Forty Thieves.

* * *

Question: Based on the information in the job ads, what tentative conclusions can you make about jobs in our economy, or about the way they are advertised? EXAMPLE: Many of these job advertisements make a direct appeal to a certain type of personality. Can you list some others?

1.

2.

3.

4.

* * * * * * * * * *

Today's Lesson in Brief

There are many different types of jobs in the American economy. All the workers in these jobs are making a contribution to producing our economy's goods and services. These jobs differ a great deal in terms of employment qualifications, pay, hours, working conditions, and so forth. Some of these jobs will offer you an employment opportunity when you are ready to enter the manpower market.

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## Wages, Earnings, and Family Income

Wages are the financial rewards of work. Of the total National Income, nearly three-fourths is paid each year to workers as "Compensation of Employees". These wage earnings are the most important source of income for most families. Hourly wages, weekly earnings, and annual income vary greatly among workers and families. These wage and income differences are significant because there are strong linkages in our economy between jobs, earnings, consumer buying power, and levels of living.

* * * * * * * * * *

One reason why people work is "to make a living". In the input market workers exchange their manpower for wages so they will have money to spend for the purchase of goods and services as consumers in the output market. ("Wages" is a general term that includes all forms of labor income -- hourly wages, salaries, sales commissions, bonuses, personal fees, etc.)

Almost three-fourths of total National Income is paid regularly to the nearly 80 million people who contribute manpower to the productive process. In 1966, Compensation of Employees amounted to $433 billion, or about $6,000 per worker. (If you count in the labor income of self-employed businessmen, farmers, and professionals, the total would be even higher.)

People who do different kinds of work get different rates of pay. This should not be surprising, since jobs differ in level of difficulty; the education, skills, and experience required; hours and working conditions; location; and in many other ways. And there are also differences in the relative supply and demand for workers with particular qualifications. (If the supply of farm workers, for example, is relatively high, while the demand for such workers is relatively low, we would predict that wages will be low.)

In the early months of 1967, the average production worker in manufacturing earned $2.80 per hour and approximately $112 per week. The average construction worker earned $4.00 per hour and nearly $150 a week. The average employee working in retail trade (sales clerk in a department store, checker in a supermarket) earned $2.00 per hour and $70 per week. (Many workers employed in hotels, restaurants, textile mills, and laundries earn less than $1.00 per hour.)

Professional, business, and technical workers generally receive the highest pay, while laborers, farmers, and service workers get lower pay. Future lessons will focus attention on just exactly how much money that people with different levels of education and skill earn in various occupations and industries.

* * *

Wages and earnings have increased a great deal for American workers in the past 20 or 30 years. Back in 1929 -- when your grandfathers were starting their work careers -- 60¢ an hour was considered to be a pretty good wage. Average weekly earnings for employees in manufacturing was $24.76. In the depression of the 1930's, average earnings fell to $16.65 a week. Coal miners earned even less.

But in the 1940's, wages more than doubled, and by 1954, average earnings in manufacturing reached $70 per week. However, since prices rose during World War II and afterwards, part of the increase in money wages was eaten up by inflation. Nevertheless, real wages -- wages measured in dollars having a fixed buying power, after all adjustments for inflation -- just about doubled between 1940 and 1966. Each hour of labor today earns twice as much real buying power as it did 25 years ago.

* * *

We said that wage earnings are the most important source of income for most families. Some families receive income from other sources -- dividends on shares of stock they own, interest on savings bonds, government transfer payments (such as Old Age, Survivors, Disability, and Health Insurance benefits under the social security program). (Also note that since many families have more than one wage earner average family income is greater than the average earnings per worker.)

In 1965, the average (median) family in the United States received an income of $6,880. This means that half of the 48 million families in the country had incomes above $6,880 and half had incomes below $6,880. It is interesting to note that eight million families had incomes below $3,000 per year -- which put them in the "poverty" category, according to income standards set by the federal government. (The statistics given here apply only to families having two or more members. Figures for "Unrelated Individuals" are not included.)

In Ohio, income per person in 1966 was a little over $3,000. That is, if you took all of the income received by all of the people in Ohio and added it together, and then divided by 10 million (which is the number of people living in Ohio) the average (mean) income would be $3,000 per year. This was $100 above the national average and placed Ohio 15th among all states.

* * *

We have said in earlier lessons that there are three big questions that every economic system must answer:

1-- What should be the overall level of economic activity?
(How much to produce?)

2-- What kinds of goods and services should be produced?
(What to produce?)

3-- How should the nation's income be distributed?
(For whom to produce?)

This third question means: how should the income that is produced by the economy be shared among the families and individuals that make up the economic society? How should the money income be divided? (Since distribution of money income determines the distribution of buying power, it also determines the quantities of goods and services that various consumers can purchase.)

* * *

If the total Personal Income in the United States were divided equally among all family units (even including one-person units), the income per family would be just under $10,000 a year. Income is not equally divided in the United States, so instead of all families receiving $10,000 a year, only about one-fourth of the families get this much income. Table I shows how income actually was shared in the United States in 1965:

Table I. SHARE OF INCOME RECEIVED BY EACH FIFTH OF U.S. FAMILIES, 1965

| | | % of Total U. S. Income |
|---|---|---|
| Lowest Fifth | (under $3,400) | 5 |
| Second Fifth | ($3,400-5,800) | 12 |
| Middle Fifth | ($5,800-7,900) | 18 |
| Fourth Fifth | ($7,900-11,000) | 24 |
| Highest Fifth | (over $11,000) | 41 |
| TOTAL | | 100% |

SOURCE: U. S. Bureau of the Census data as published in Herman P. Miller, "The Distribution of Income", Economic Topic, Joint Council on Economic Education, New York, November, 1966.

The table shows that if we divide all families in the United States into five groups, according to the amount of income they received in 1965, the lowest group -- made up of 10 million families, with approximately

40 million people -- got only 5% or one-twentieth of the nation's income. The highest group -- the 10 million families at the top of the income scale -- received 41% or eight-twentieths of all the income. So the top group got eight times as much income as the bottom group. (The top 1% of families received as much income as the lowest 20%, which means the richest families had 20 times as much income as the poorest families.)

Families in the top income group are frequently headed by a professional or technical worker, or by a business manager. Families in the lowest group are very often headed by unskilled workers, farmers, or men or women who are not employed at all.

* * *

Questions: Do these statistics on wages, earnings, and family income surprise you? Do you feel that the distribution of income in the United States is just about the way it ought to be? Could you make an intelligent study of income distribution without the aid of economic statistics?

* * * * * * * * * *

## Today's Lesson in Brief

Workers receive nearly three-fourths of total National Income every year as their payment for contributing manpower to the production process. There are great differences among workers and families in terms of hourly wages, weekly earnings, and annual incomes. The average production worker in manufacturing earns about $2.80 per hour ($112 per week). The median FAMILY in the U. S. receives nearly $7,000 of income per year. If all families are ranked according to the size of their income, the top one-fifth of all families gets 41% of total income, while the lowest one-fifth gets 5% of total income.

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## The Joy of Work

One of the most important rewards of work is the sense of personal fulfillment and joy that results from a job that's well done. Learning how to find personal satisfaction from work will help offset the elements of boredom, discomfort, and other negative aspects that every job will have to some extent.

* * * * * * * * *

Today's lesson consists of a series of nine cartoons that illustrate some important ideas and attitudes about work and the personal happiness and fulfillment that sometimes come from work. These cartoons appeared in the booklet, Satisfaction Guaranteed, published by The Connecticut Mutual Life Insurance Company, Hartford, Connecticut.

* * *

1. OH, WHAT A WONDERFUL FEELING. Is work just "a necessary evil"? Or is it really "fun"?

2. AWAY FROM IT ALL.
Have you noticed that when you are absorbed in a job, minor problems and frustrations seem to disappear (at least temporarily)?

3. "HERE, BOSSY".
Work is something ambitious people are willing to do in order to achieve their goals. For those who are satisfied to stand still, Bossy's life seems ideal.

4. THERE'S NOTHING LIKE IT.
If you worked a 15-hour day, do you think you'd be worn out and miserable? Or satisfied and happy with a glow of accomplishment?

5. CAPTAIN OF INDUSTRY.
Is work simply a means to an end--$$$$? What role did work play in this man's life, before his wife talked him into retiring "to enjoy his money"?

6. WORKMANSHIP.
Do you think there is such a thing as "a human instinct of workmanship"? Who deserves credit for constructing this building?

IT SURE WOULD BE NICE TO HAVE YOUR OWN FARM AND STAY PUT.
IT SURE WOULD BE NICE TO BE UP THERE FLYING ALL OVER THE PLACE EVERY DAY.
RAMA

7. OLD STORY IN MODERN DRESS.
Is the grass really greener on the other side of the fence? How might the pilot and the farmer satisfy their wishes?

8. AUTHENTIC CHIP-AN-NAIL. After a busy day on the job, why do some people rush to their basement workshop as soon as dinner is over?

9. THE WINNING TICKET. (Fred X. Hustler won $100,000 in the Grand National Sweepstakes.) Is a life of ease really "the good life"? Or was Fred's life more meaningful when he was an active, ambitious salesman?

* * * * * * * * *

## Today's Lesson in Brief

The real people and real situations described in these cartoons suggest that work is a necessary part of life and can be a source of personal satisfaction, happiness, and fulfillment.

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## "Gross National Product" and Some Fundamentals of Economic Statistics

The Gross National Product (GNP) of any nation is the total value of all the goods and services that its people produce in a particular year. GNP statistics -- measuring the dollar amounts of goods produced -- are useful because they give us important facts that help in studying how our economy is behaving. In addition to GNP, we shall also want to use some other "economic indicators" such as the Consumer Price Index and the Unemployment Rate.

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Economics is a science, a social science. This means that scientific methods are used in studying the subject matter. People who want to read, think, and talk intelligently about economic questions have to master certain skills. They must become competent in using the techniques of STATISTICS, THEORY, AND HISTORY.

Theory and history are considered in other lessons. Today we want to learn something about economic statistics, and especially the way to measure the performance of our economy by using Gross National Product statistics.

* * *

Many people seem to have a strange attitude toward statistics. "There are three kinds of lies -- plain lies, damned lies, and statistics." "Figures don't lie; but liars figure." "I make up all of my statistics; isn't that where you get yours?" There is even a book entitled, How to Lie with Statistics.*

This attitude would be healthy if it caused people to be very careful about the way they used statistics. But unfortunately some people go beyond caution -- they refuse to believe any statistics at all! And this attitude comes close to saying, "Don't bother me with the facts; I'll make up my mind without them."

The truth is that most of the facts about economic questions come to us in the form of statistics. These are numbers that describe what is happening in the economy in terms of production, employment, spending, and

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* It is a very interesting and readable book, 142 pages long. The author is Darrell Huff, and the book was published by W. W. Norton & Co., New York, in 1954. Later editions are available in paperback.

all sorts of other activities and conditions. The numbers come from business, labor, farm groups, private research organizations, and state and federal government agencies. Most of the statistical data (the numbers) that we'll be using in this course come from government agencies. Studies have been made of government statistics by unbiased experts, and their judgment over and over again has been that the statistics generally are as accurate, honest, and complete as anyone could hope for.

* * *

Let's look at one set of economic statistics: the Gross National Product accounts. Table I shows the GROSS NATIONAL PRODUCT of the United States for 1966.

Table I. GROSS NATIONAL PRODUCT OF THE U. S., BY SECTORS, 1966

| | (billions of dollars) |
|---|---|
| Personal Consumption Expenditures | $465 |
| Gross Private Domestic Investment | 117 |
| Net Exports of Goods and Services | 5 |
| Government Purchases of Goods & Services | 153 |
| TOTAL GNP | $740 billion |

SOURCE: Economic Report of the President 1967, U. S. Government Printing Office, p. 213.

What do these figures mean? They tell us that the market value of the total output of final goods and services in the United States in 1966 amounted to 740 billion dollars. The dollar value of all the goods and services that we produced that year came to $740 billion. How do we compute the total? We simply add up all of the money that consumers spent to buy goods and services during the year ($465 billion); plus the investment spending by business firms on new equipment and buildings, etc. ($117 bil.); plus the excess of goods that we produced in this country and then shipped overseas above what foreign countries produced and sent to the United States ($5 bil.); plus the money spent by local, state, and federal government agencies to buy goods and services ($153 bil.) -- and we get a total of $740 billion. GNP = C + I + X + G. This is the total market demand for newly-produced goods and services.

GNP is the <u>total spending</u> for (final) goods and services during the year -- eliminating the double counting of goods that are bought and sold by businesses in the process of production. Another way to look at GNP is to see that it is the total money value of the goods that our nation produces. GNP = Price x Quantity. GNP equals the <u>Quantity</u> of goods and services produced multiplied by the average <u>Price</u> of goods and services.

The four terms in the GNP formula show that we have four major spenders in our economy: Consumers, Business, Foreigners, and Government. Altogether they purchase the entire output of our economic system.

* * *

<u>Questions</u>: What will our GNP be this year? How many zeros in a <u>billion</u>?

* * *

There is no need to become an expert in GNP accounting. The important thing to remember is that GNP is a measure of the total <u>output</u> of the economy. When GNP goes up, after adjusting for any change in prices and the value of money, then we know that production has increased. If GNP remains constant year after year, then the economy is not expanding. If GNP goes down, we are in a "recession". GNP is the most important single measure of economic performance that we have available. Every student of economics should understand what it is and how to interpret GNP statistics.

* * *

Now, let's examine two other important statistical indicators that we'll use in this course: the <u>Consumer Price Index</u> and the <u>Unemployment Rate</u>.

* * *

The CONSUMER PRICE INDEX, or the so-called "cost of living index" is a number that measures changes in the buying power of the dollar. When the Consumer Price Index (CPI) goes up, it means that the general level of prices is going up for the goods and services that consumers typically buy. When prices go up, the value or purchasing power of the dollar goes down. This is why <u>inflation</u> is considered to be a bad condition -- because people with a given number of dollars (such as older people living on fixed-income pensions) are unable to buy as many goods and services as they could before price inflation occurred.

The Consumer Price Index is figured on a base of 100 for the period 1957-59. In March of 1967, the CPI stood at 115.0. This meant that in 1967 it took $1.15 to buy the same "package" of goods and services that could have been purchased in 1958 for $1.00. Because of inflation -- as measured by a 15% increase in the Consumer Price Index -- the value of the dollar declined. During the 10-year period from 1957 to 1967, the Consumer Price index rose an average of 1½ percentage points a year. It could be said, therefore, that the rate of inflation during the past decade has been 1½% a year.

Question: What would happen to the purchasing power of the dollar if the Consumer Price Index dropped by 50%?

* * *

The UNEMPLOYMENT RATE is a measure of unused manpower in the economy. It is an estimate of the number of men and women who are able to work and actively seeking employment but have no job, compared to the total number of persons in the civilian labor force.

The civilian labor force is made up of all persons 16 years and over who are able and willing to work (not in school, not in military service, not in prison, etc.). The size of the civilian labor force is growing every year, and in December of 1966 it was just under 77 million. Nearly three million people were jobless. Therefore, the national Unemployment Rate was 3.7%. The rate in Ohio was even lower, 3.2%! This is the lowest unemployment rate in many years and was a cause for great celebration among economists. (During the Great Depression of the 1930's, the Unemployment Rate averaged nearly 20%!)

Question: What do you think the Federal government would do today if the Unemployment Rate increased to 20%?

Statistics of labor force, employment, and unemployment are not perfect, but they are the best indicators we have for measuring the use of resources in our economy. When the unemployment rate for labor increases, we assume that unemployment rates are also rising for capital goods and natural resources. When this happens, we are falling below the potential output that our economy is capable of. We are therefore wasting resources and "losing" goods and services that could be produced, but aren't. We are failing to achieve our national goal of full production.

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Today's Lesson in Brief

Ability to understand and use economic statistics is necessary in order to read, think, and talk intelligently about economic questions. Three important statistical indicators that we will use throughout this course are: Gross National Product, the Consumer Price Index, and the Unemployment Rate.

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## Scarcity, Opportunity Costs, and Choice

"Words are the vehicles upon which ideas ride."

The ideas that "ride" on the three terms included in the title of today's lesson are among the most important ideas in economics. Because of SCARCITY, economic choices have to be made and every CHOICE involves a COST. Why? What do these terms mean, and how can the ideas be used in making wiser decisions?

* * * * * * * * * *

There is a child's verse that goes:

"If all the world were apple pie,
And all the sea were ink,
And all the trees
Were bread and cheese,
What would we have to drink?"

If food, and other goods and services, were available just for the asking -- "there would be no economic problem, and no need to study economics". Or so some people say. Note that if money grew on trees, rather than goods and services, we would still have the same old problem of finding resources that could be used to produce the goods and services you'd want. Your own private money tree might be great, for you, but if everybody had a money tree, money would be worthless. After all, you can't eat money; you can only trade it for something of value.

Looking at the world economy as a whole -- with its three and one-half billion people -- we can readily see that there aren't enough goods and services available to satisfy all the wants that men, women, and children can think up. In fact, throughout much of the world, there isn't enough food to keep people from starving to death. Thousands of people die of starvation every single day -- not so many in the United States, but large numbers in other parts of the world such as India, China, Africa, and the Middle East. For two-thirds of the world's people, life is a desperate and painful struggle for existence, without comfort, without convenience, without progress, and without hope. Income per person in the poorest countries is less than $200 per year, compared to the per-capita income of $3,000 per year in the United States!

* * *

But even in our country, most of the people would like to have more goods and services than they actually get. Then, why not simply produce more?

The answer is, we don't have enough resources -- manpower, capital, and materials -- to produce all of the goods and services that people would like to have. Goods are "scarce" relative to our wants, because the resources needed to produce the goods are scarce relative to physical requirements. This is what SCARCITY means -- not enough resources compared to what we would like to have.

Because resources are scarce, we must "economize" in their use -- that is, we must choose how to use our limited resources to provide the goods and services that we as a society value most highly. If we can't have everything we want, then we need to plan and make choices to get the most out of what we have. For an individual, or a family, the same problem exists. Because you don't have unlimited amounts of money, you have to economize and plan how to spend your money in the most "economical" way -- so you can get the most for the money you do have.

* * *

It's a fact of life that resources are scarce, and choices have to be made concerning the use of available resources. Are there any aids (ideas, skills, concepts, tools) that you can learn from the science of economics to help you make wiser choices?

Yes, there are. And one idea is especially useful -- the concept of OPPORTUNITY COST.

To help you decide how to spend your weekly allowance (say, one dollar), you can first of all think of some possible alternative uses for your money. You can buy 10 bottles of pop, go to the movies three times, buy four chocolate milkshakes. (Or you could save your dollar.) What is the cost of four chocolate milkshakes?

Assuming the price is 25¢ per milkshake, you could say that the total cost of four shakes is one dollar (25¢ times 4 milkshakes). Or, thinking in terms of the other things you had to give up if you spent your dollar to buy four shakes, the opportunity cost of the shakes was 10 bottles of pop, or 3 movie tickets.

The OPPORTUNITY COST of buying (or producing) a good or service is the ALTERNATIVE goods and services that you had to give up (sacrifice, forego) in order to obtain the particular goods you selected.

The opportunity cost of national defense to the American people is all of the houses, cars, hospitals, and schools that we can't have because we use so many productive resources for bombs, missiles, and nuclear submarines. The opportunity cost of having six million young men and women in college is the value of the goods and services they could have produced if they were employed on jobs instead of going to school. (From the viewpoint of an individual student, the opportunity cost of spending four years in college is the amount of income he could have earned if he were employed on

a full-time job during those four years. Add this to the tuition and other direct costs in order to compute the total costs of a college education.)

This is an important idea, and a very useful one. It helps us make wiser decisions concerning the way we should use our resources, by giving us a basis for comparing the benefits of different uses. In the example above, if we feel that we would enjoy the benefits of four milkshakes more than 10 bottles of pop -- or some other attainable combination of goods and services (such as five bottles of pop plus two milkshakes) -- then we can have more confidence that we are spending our money wisely.

If we see what could be produced with 10 million dollars worth of manpower, capital, and materials if we decide not to produce a new bomber for the U. S. Air Force, we are in a better position to choose, as citizens, what we consider to be the best combination of goods and services.

* * *

Some questions for discussion:

1. Why can't people have all the goods and services they would like to have? How would your answer to this question differ if you were thinking of one person, or if you were thinking of all the people of the country as a group?

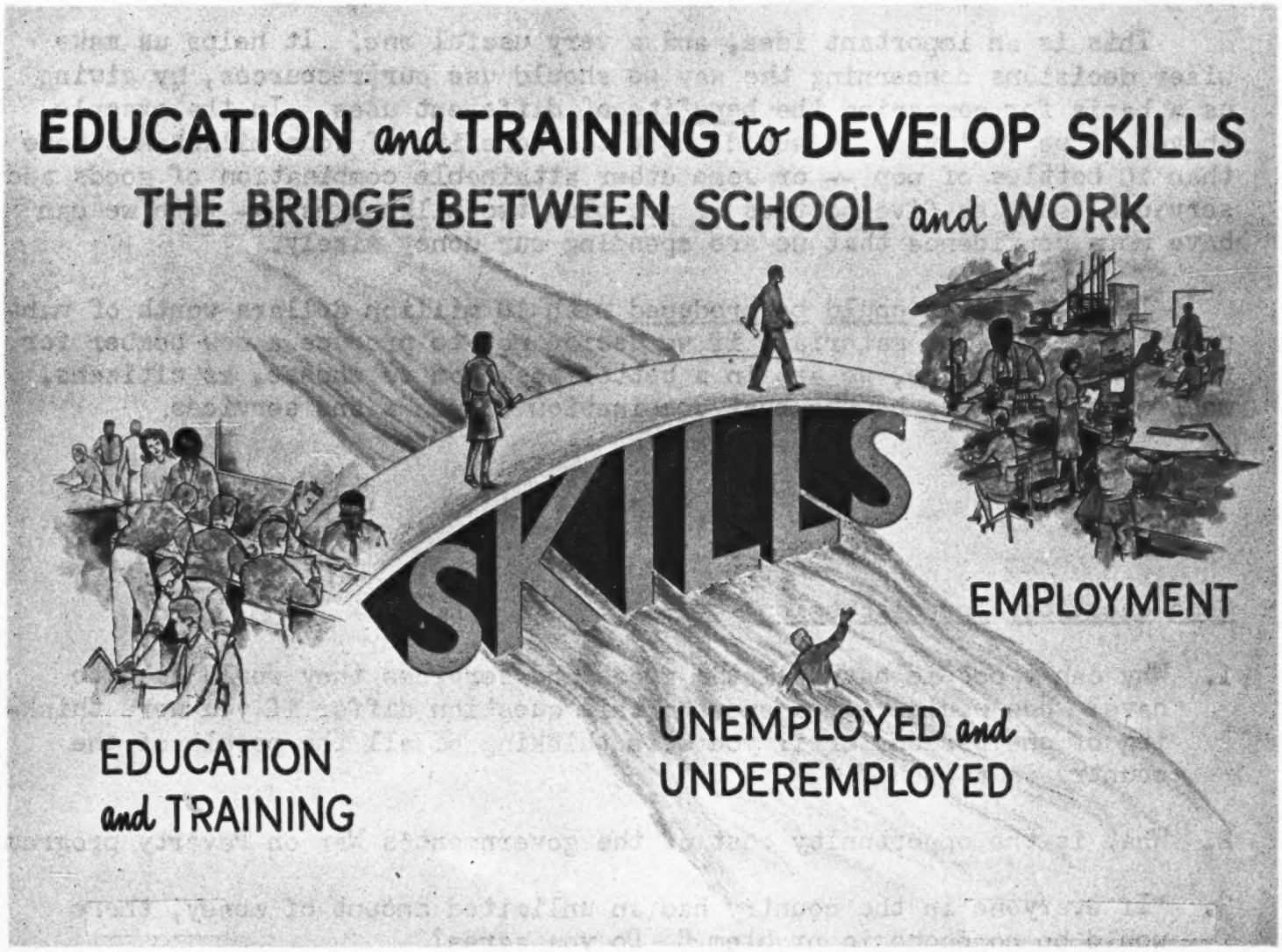
2. What is the opportunity cost of the government's War on Poverty program?

3. "If everyone in the country had an unlimited amount of money, there would be no economic problem." Do you agree?

* * * * * * * * *

Today's Lesson in Brief

Resources are scarce in the sense that we don't have enough manpower, capital, and natural resources to produce all the goods and services that people would like to have. Because resources are scarce relative to our needs and wants, we must choose among alternative uses. The concept of opportunity cost helps in making these choices by showing the amounts of other goods and services that we have to give up when we decide to devote our available resources to one use rather than to another.




Opportunity cost and choice are involved in developing the skills needed for employment. You must invest both time and resources to learn job skills. Young men and women must choose the amount and type of education and training they will get. The manpower skills you acquire will help you qualify for a better job.

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## "There Is No Such Thing as a Free Lunch"

One of the basic facts of life is that we can't get "something for nothing". One particular person might get it for nothing, but it costs somebody something (perhaps a great deal of "something"). In economics, the OUTPUT of goods and services (like cars and candy and clothing) depends on the INPUT of productive resources such as labor, equipment, and raw materials. There are always COSTS involved in the production of goods and services.

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Unless you're a magician, you can't get rabbits out of a hat unless you first put something into the hat. To produce chickens, you have to have eggs. To grow corn, the farmer needs seed, soil, fertilizer, the services of a tractor, and lots of hard work. To build a bridge, you need steel, heavy equipment, skilled workers, and engineers. Economic activity doesn't begin with buying and selling. It begins with production -- the use of resources to produce goods and services.

* * *

Several years ago the economics editor of a major national news magazine spoke to a group of professional economists at their annual meeting. His topic was "The Teaching of Economics", and he started off by listing -- partly as a joke -- "some simple, basic economic truths that every one should be taught". His first "truth" was this: "There is no such thing as a free lunch".

(Years ago, it was the custom for taverns to advertise "Free Lunch" to attract business. The sandwiches and pretzels were free. Customers had to buy their own drinks.)

What the economics editor meant was that goods and services are not "free" in the sense that they don't have to be produced, or paid for. The free lunches might be free to the customers, but that doesn't mean there were no costs involved. There were costs. (The tavern owner had to pay for the pretzels and bread and meat and pickles and mustard. Wheat and rye had to be grown to provide the flour to make the bread, and livestock had to be fed and marketed and processed by meatpackers, and so on. All this involved costs of production.)

For every unit of output, there must be INPUTS -- materials, manpower, and capital. (This is true in education, too, as the editor pointed out later in his talk. "In the great cafeteria of economic understanding, there is no such thing as a free lunch." What do you suppose he meant by that remark?

* * *

Let's look at the OUTPUT of the U. S. economy for 1966, and then see what INPUTS of resources were necessary to produce the goods and services.

In 1966, the total output (GNP) of the U.S. economy amounted to $740 billion. We produced $465 billion worth of goods and services for consumers, such as food, cars, clothing, books, vacation trips, and so forth. Our economy produced $117 billion of capital goods for business investment, such as new machinery, office buildings, and inventories of goods. We exported to foreign countries $5 billion of goods and services in excess of what we imported from other countries. And we produced $153 billion of goods and services for use by local, state, and federal government agencies. This included $60 billion of weapons, ships, airplanes and manpower services for national defense; the services of two million school teachers; and goods and services needed for all the other functions performed by city, county, state, and federal government. (Here's a simple formula to remember for counting the nation's total output of goods and services: $GNP = C + I + G + X_n$. Gross National Product is the total of all spending for Consumption + Investment + Government Purchases + Net Exports.)

The following table shows our total output for 1966 and how it was divided among the four groups of buyers in our economy.

Table I. GROSS NATIONAL PRODUCT OF THE UNITED STATES, BY SECTORS, 1966

| | (billions of dollars) | (per cent of total GNP) |
|---|---|---|
| Consumer Goods and Services | $465 | 63% |
| Gross Private Investment | 117 | 16 |
| Net Exports | 5 | 1 |
| Government Purchases of Goods & Services | 153 | 21 |
| State & Local Governments | ( 76) | |
| Federal Government | ( 77)* | |
| TOTALS | $740 | 100% |

*Federal purchases for purposes other than national defense totalled $17 billion.

SOURCE: Economic Report of the President 1967, U. S. Government Printing Office, p. 213.

* * *

What were the INPUTS that were used in producing all those goods and services?

The input of MANPOWER is seen in figures on labor force employment. During 1966, on the average there were 73 million men and women employed in producing goods and services. This number includes all of the unskilled workers, the technicians, the managers, self-employed doctors and lawyers, and everyone else who was employed during the year.

* * *

The input of CAPITAL is a little harder to measure. You can get a rough idea of the capital input, however, by looking at the following table. It shows, for example, that every worker in the chemicals industry had an average of $77,000 worth of equipment, buildings, and tools on hand to help him get the job done.

Table II. CAPITAL INVESTED PER EMPLOYEE IN MANUFACTURING, 1962*

| Industry | Amount |
|---|---|
| Chemicals | $77,000 |
| Motor Vehicles | 22,000 |
| Petroleum (refining, extraction, pipe lines) | 27,000 |
| Printing & Publishing | 11,000 |
| ALL MANUFACTURING INDUSTRIES (AVERAGE) | $16,000 |

*Total investment divided by all employees, including clerical and supervisory.
SOURCE: "Road Maps of Industry" #1526, National Industrial Conference Board, 1965.

* * *

The input of NATURAL RESOURCES is even harder to measure than capital. We will only illustrate the input of natural resources by pointing out that a few years ago each consumer in the United States -- every man, woman, and child -- used 18 tons of materials each year. He used 7 tons of fuel for heat and energy, 2 tons of building materials, 3 tons of food and other agricultural materials. He consumed 150 gallons of water per day in household consumption. An additional 1,250 gallons per person were used per day in industry and agriculture. (Compare this total water use of 1,400 gallons per person each day in the United States with a total of only 50 gallons a day in Europe.)

* * *

What we have shown is that large amounts of manpower, capital, and natural resources were required to produce nearly three-quarters of a trillion dollars worth of goods and services in 1966. With only 6% of the world's population, and not quite 7% of its land area, the United States each year produces about <u>one-third</u> of total <u>world output</u>. Of all the raw materials used up in production each year in the entire world, the U. S. economy consumes more than <u>half</u>. Our output is fantastically great, but our input of resources is also large. (If we continue using materials at current rates, will we ever run out? Is the "conservation of natural resources" a problem that we ought to pay close attention to?)

* * *

Economists have a fancy name for the relationship between inputs and outputs. They call it a "production function". (Math students will recognize the term, "function" -- a relationship between variables.) A production function tells what kinds and amounts of resources are needed to produce a particular good, assuming that a certain method of production will be used. Technological progress and automation cause production functions to change. Why?

* * *

One final point concerning the idea that "there is no such thing as a free lunch." Sometimes people make the mistake of thinking that goods and services that come from the federal government are free. Citizens may vote against a local tax increase for schools because they don't want to pay the cost. Then, they may turn around and tell their Congressman in Washington that they are in favor of federal aid to education -- because they think they are getting something for nothing. But federal money comes from taxes that these very same citizens have to pay. Is the education you are getting "a free lunch"?

In the same way, colleges often receive gifts from business corporations, to pay for new buildings. Are the new campus buildings "free"? Obviously somebody paid for them -- the stockholders in the corporation, consumers who pay prices that more than cover the costs of production, employees whose wages might have been higher if the corporation's extra money had gone to them rather than to a college.

This doesn't mean it's wrong for the federal government to help pay for the schools. Or that corporations shouldn't give money to colleges and universities. It simply means there is no such thing as a free lunch.

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<u>Today's Lesson in Brief</u>

One of the first lessons of economics is that it takes INPUTS (of manpower, capital, and materials) to get OUTPUT. There are <u>costs</u> involved in producing goods and services, and somebody must pay these costs.

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## Models, Theories, and the Real World

The economic world is so complicated and confusing -- involving millions of people making tens of millions of decisions affecting the production of billions of dollars worth of goods and services -- that we couldn't even begin to understand it without simplifying and carefully organizing the subject matter. In order to study and explain how the economy functions, scholars have developed ANALYTICAL FRAMEWORKS, simplified MODELS, and economic THEORIES. Many of these models and theories are very simple and very useful for explaining and predicting economic behavior.

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"The construction of a model consists of snatching from the enormous and complex mass of facts called reality a few simple, easily manageable key points which, when put together in some cunning way, can serve for certain purposes as a substitute for reality itself. Simplication is the heart of this process."

-- Professor Evsey Domar, Massachusetts Institute of Technology

* * *

In order for a person to think clearly about economics, and be "economically literate", he must learn how to use three kinds of tools: History, Statistics, and Theory, We have already learned something about economic statistics, and history appears in many lessons. Today, we'll learn something about theory.

We found that there are 60,000,000 consumer units in the American economy, about 80 million resource owners, and more than 10 million business firms. There are 260 "working days" in a year (52 weeks times five days in a week). Most households make at least one consumer decision (for example, to buy a loaf of bread from the store) every working day. Multiply 60,000,000 consumer units by 260 decisions, and that comes to more than 15 billion individual consumer decisions made in the U. S. economy during the year. Add the decisions made by resource owners and business firms -- and, the total number of decisions becomes enormous!

How are all these decisions coordinated? How could anyone possibly explain or predict the patterns of decision-making and economic behavior? The answer: By simplifying. And by organizing the important facts systematically in order to study and analyze them.

* * *

Let's consider how in this course we simplify and organize facts and ideas to help explain economic behavior. What did we do first? We set up a framework for studying economics. We divided all the factors that concern the economy into three groups and called them "Resources", "Technology", and "Institutions". (These are "subsets" of the set of forces that we identify as "economic forces".)

Next, we went beyond this analytical framework and developed simple MODELS. One was the circular flow model, which helps explain how the market is organized and how it operates. A model tells something about how the economy behaves. It shows relationships among important factors. The circular flow model shows how consumers buy goods and services in the output market. It illustrates how resource owners sell their productive services in the input market. And it shows how business firms buy in the input market and then sell in the output market.

A MODEL is a scheme or gadget that represents reality, just as a globe is a round model (or map) of the earth. Most of the models used in economics, however, are purely graphical -- pictures, numbers, and words.

* * *

What about THEORIES? For some people, "theory" is a scare word. But it really shouldn't be. An economic theory is just a more specific kind of model. A theory describes a set of specific relations among economic forces. It tells something very specific about the world of facts. The Supply and Demand Theory of Market Prices, for example, tells us that the price of a good is determined -- when there is competition in the market -- by the interaction of Supply and Demand. The theory tells us that an increase in supply, with no change in demand, will cause the market price to fall. An increase in demand, with no change in supply, will cause the market price to rise.

A theory has certain assumptions and definitions; it makes predictions; and it shows how experimental tests can be conducted using facts in the real economic world. (Many so-called theories are not really theories because there is no possible way to check whether they're valid.)

* * *

There is no need to learn all about economic theory, or even to learn the Supply and Demand Theory of Price. There will be time enough to study that in more advanced courses. The only thing necessary right now is that you understand what a theory is and how economic theories are used to explain how the economic system and the manpower market function in the real world.

* * *

Let's consider just two more important questions about models and theories.

First, when is a theory a good theory? Have you ever heard the statement, "That's all right in theory, but it doesn't work in practice." Actually, if a theory doesn't work in practice,then it isn't "all right". In fact, if it doesn't work in practice, it's just a bad theory. Theories, like all tools, are supposed to be useful -- to help you do a job. If a theory can be useful to make accurate predictions about economic behavior, it's a good theory. If a theory doesn't help do the job of predicting and explaining behavior, then it's a bad theory.

In economics, we don't have good theories to explain everything. In fact, there are a lot of things we really can't explain or predict very well. Like, how many skilled carpenters will be employed in Columbus, Ohio, in 1975? But economics is a fairly young science, and improvements are being made all the time. It took physicists a long time to solve the mystery of atomic and nuclear energy. Meteorology (the study of weather) still is not a very exact science. A science like economics that tries to understand and explain the behavior of people, in their complex and continually changing economic life, can be expected to be "inexact" and far from perfect. But remember we do have some excellent theories, some very useful models, and an analytical framework that can help you understand the economic world you live in.

Finally, there is the question: how important are theories, anyway? One of the most famous economists of our time, John Maynard Keynes (an Englishmen who died in 1946), wrote an answer to that question that is widely quoted all over the English-speaking world:

> "The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else."

Question: Do you agree with Keynes that the world is ruled by the ideas of economists?

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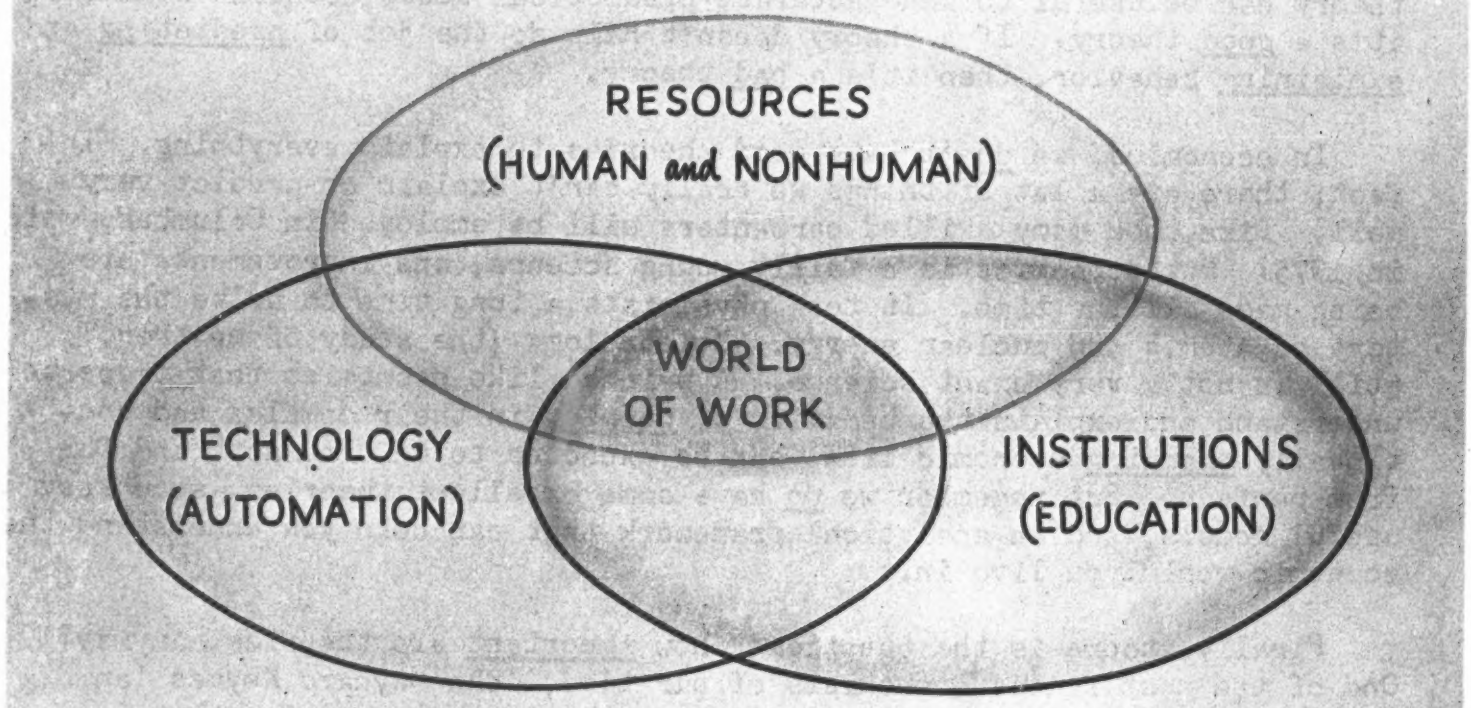
Today's Lesson in Brief

In order to explain economic behavior, economists make use of ANALYTICAL FRAMEWORKS (to organize the subject matter systematically); simplified MODELS; and economic THEORIES. Theories that are "all right in theory, but don't work in practice" are really not "all right in theory". Only if a theory can be used to give accurate explanations of the behavior of economic forces, only then is it a good theory.

# THE CHANGING WORLD OF WORK




The three intersecting ellipses pictured above represent Resources, Technology, and Institutions. This visual describes a model that can be used to explain the economy and the changing world of work.

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## What Are the Steps in Economic Reasoning?

Economic problems are like other kinds of problems. If you want to find good solutions, it helps to organize your thinking and use a systematic, step-by-step approach. This involves getting a good understanding of the problem, thinking about what your goals are, looking at different possible solutions, and then making your own choices and decisions.

* * * * * * * * * *

You have learned that every economic system faces three basic problems. There are times when the people of a given economic society don't like the way these problems are being solved. Now, what would you do if you wanted to reason out a good solution to one of the basic economic problems -- or to any of the smaller problems related to the large ones?

Well, let's start out by noting that economic problems are like other kinds of problems. If you want to find good solutions, it helps to organize your thinking and use a systematic, step-by-step approach -- (the way professional economists tackle problems when they are called upon to advise businessmen, government agencies, and others). Here is a five-step approach to economic reasoning, the way it was described in a famous book written several years age:

1-- Define THE PROBLEM by looking very carefully at the most important <u>facts</u> and thinking about the main <u>issues</u> and <u>questions</u> involved;

2-- Identify GOALS, that is, the things you would like to accomplish if you can find some way to do it;

3-- Consider ALTERNATIVE METHODS for reaching your goals (usually there is more than one way to get a job done, and if you think creatively and use your imagination, you can think of a lot of possible ways of doing what you want to do;

4-- Study the probable OUTCOMES that might result from using each of the different methods that might be used for reaching your goals;

5-- Finally, after thinking about the problem carefully and systematically -- studying the facts and the different possibilities -- then make your decision and CHOOSE the solution that you think gives the best chance of achieving the goals you picked.

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*Marshall A. Robinson, H. Morton, J. Calderwood, <u>An Introduction to Economic Reasoning</u> (Washington, D. C.: The Brookings Institution, 1956). A fourth edition was published in 1967 in paperback.

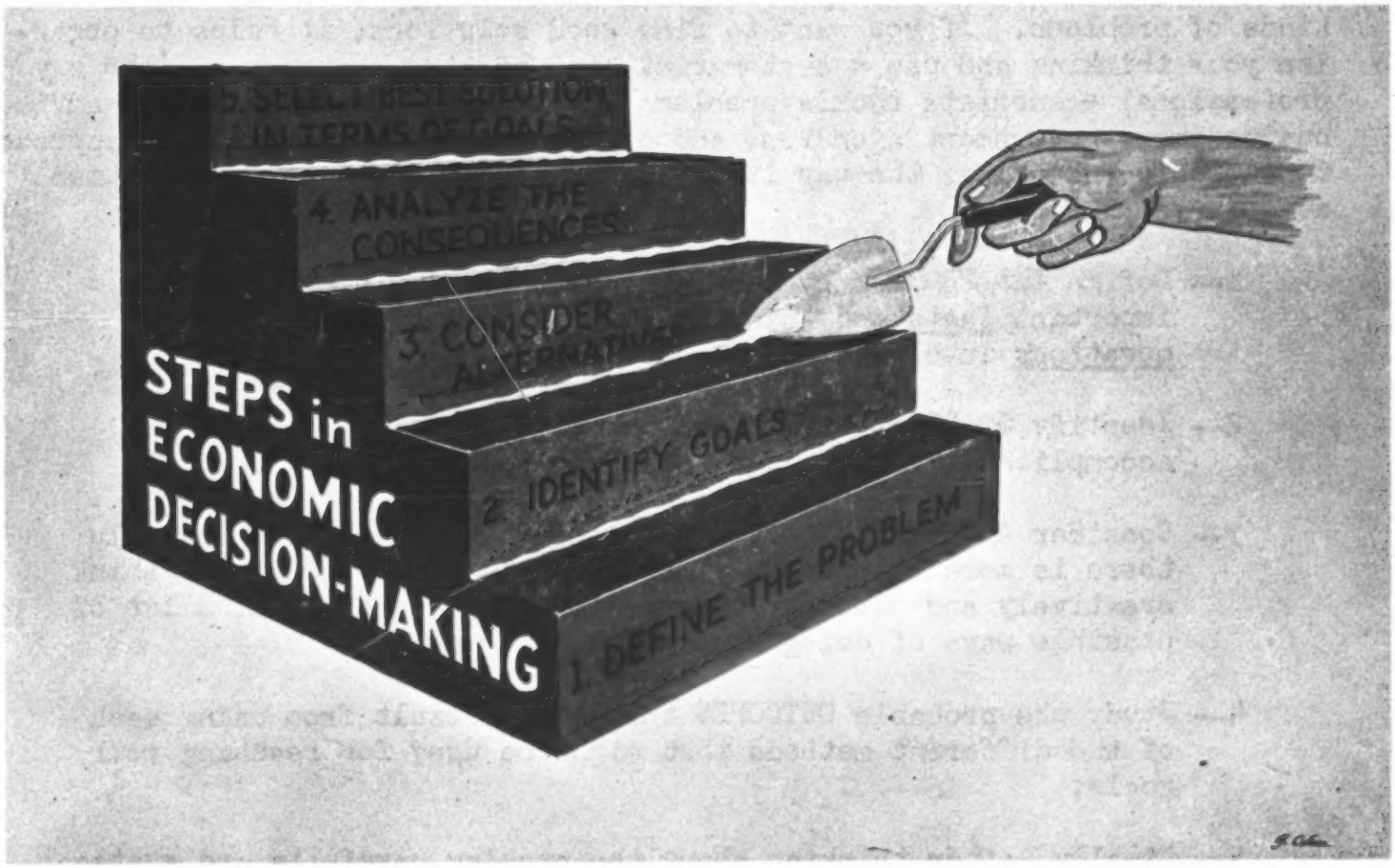
Discussion Questions

Can you think of a problem that might be solved by using the five steps of economic reasoning? For example, could this procedure help us find ways to reduce the amount of poverty in the United States? Can the five steps help you decide what kind of career occupation is best for you, and how you can prepare yourself for entering that occupation when you are a few years older? What use can you make of Statistics, History, and Theory in solving economic problems?

* * * * * * * * * *

Today's lesson in brief:

Five steps in economic reasoning can help you find better solutions to many kinds of problems. The five steps are:


5. SELECT BEST SOLUTION IN TERMS OF GOALS
4. ANALYZE THE CONSEQUENCES
3. CONSIDER ALTERNATIVES
2. IDENTIFY GOALS
1. DEFINE THE PROBLEM
STEPS in ECONOMIC DECISION-MAKING

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/D1/$15

## Economic Goals of the American People

Just as individual men and women have goals and aspirations -- specific things they would like to accomplish -- it is also true that groups of people have goals that they set for the whole society. In the area of economics, some important goals of the American people are Full Production, Stable Growth, Freedom of Choice, Equality of Opportunity, Economic Security, Economic Justice, and International Balance. When our economy comes reasonably close to achieving these goals, we judge the system to be successful -- because it is serving the needs of the people.

* * * * * * * * * *

When he was President of the United States in the 1950's, Dwight Eisenhower appointed a special Commission on National Goals to work out a set of goals for the American people in various areas of our national life. The Commission was made up of leaders from the fields of education, business, labor, and other professions.

In 1960, after much study and discussion, the Commission published its report, entitled Goals for Americans, (published by The American Assembly, 1960, Paperbound Spectrum Book, $1). It included ideas about what our country should do in such areas as:

Technological change
The democratic economy
Education
Economic growth
The individual

(Note that these are the very same topics that we're studying in this course.)

Later, the National Planning Association, a private research organization, made a study of the dollar cost of achieving certain goals (and published a book entitled Goals, Priorities & Dollars, by Leonard A. Lecht, New York: The Free Press, 1966). The same year, another organization published a report called A 'Freedom Budget' for All Americans (A. Philip Randolph Institute, New York, 1966). It listed specific goals in the war against poverty and other areas and recommended that an additional $185 billion dollars be spent by the federal government during the next 10 years to achieve the goals.

* * *

Setting goals, and then working to achieve them, is a sign of maturity and responsibility in a society just as it is a sign of maturity in an individual. What goals have the American people set for themselves in their economic life? And how well are these goals being achieved? These are the questions we consider in this lesson.

* * *

One important goal that the American people have set for their economy is FULL PRODUCTION. We want to make full use of the productive resources that are available -- the labor, capital, and natural resources -- and use these resources efficiently. Our nation feels so strongly about the importance of this goal that Congress passed a law (The Employment Act of 1946) making it the responsibility of the federal government to "promote maximum employment, production, and purchasing power."

How well are we achieving the goal of full employment and full production? (Since it is easier to measure employment and unemployment of manpower we use labor statistics as an indicator of the employment of all kinds of resources.)

In the 1930's we did very badly. The unemployment rate averaged nearly 20% from 1931 to 1939. Ten million people who were able and willing to work were jobless, on the average, in those years. During World War II and the Korean War, we came very close to having full employment. Then from 1954 to 1964 the unemployment rate rose above 5%, with between three and four million people unable to find jobs. By the end of 1965, economic conditions had improved, and we were close to full employment and full production throughout 1966 and 1967.

Our nation can't realistically expect to provide jobs continuously for 100% of the 80 million men and women who are able and willing to work. There will always be some unemployment -- roughly 2% to 4% of the labor force. But when millions of people are unnecessarily unemployed, it means they are not making a productive contribution to the country and they are not earning an income. For this reason, the goal of full production -- which requires both full employment and efficiency -- is one of the most important in our economy.

* * *

A second major goal is STABLE GROWTH. We want our economy to become bigger and better through the years. We measure the amount of our national output of goods and services by looking at statistics of Gross National Product. Economic growth is a steady increase in GNP per person (total GNP divided by the national population). We want GNP to increase more or less at a steady rate -- about 4% or 5% each year -- without having business recessions or rapidly rising prices (inflation), or increases in unemployment.

Since 1929, our nation's GNP more than tripled; and in the last 20 years it has grown at an average rate of 4%. Growth has not been steady,

however. In some years, GNP actually went down and we had "negative growth". From 1961 until early 1967 the economy grew rapidly and we enjoyed the most prosperous times in history. In these six years, real GNP rose 34%!

* * *

Production, employment, and growth of GNP are all pretty easy to measure. When we come to certain other economic goals, however, we have to talk about them in more general terms.

FREEDOM OF CHOICE is a goal that practically everyone would include high on the list. But what does it mean in concrete terms? Economists have pointed out that freedom of choice is important for Consumers, for Workers, and for Business.

Freedom of consumer choice means that consumers will be able to select the goods they want to buy from a fairly wide range of alternatives, according to individual needs and preferences. We are not satisfied with a system where the consumer is told: "You can have any size and color hat you want--as long as it's medium and black!"

Freedom of occupational choice is an important area of economic freedom. Men and women want to be able to choose the kind of work they will enjoy doing, and that will provide adequate wages and personal satisfaction. In this course, you have an opportunity to learn more about our economic system and the manpower market, so that you will be able to do a better job of exercising the freedom of occupational choice that is yours in America.

Finally, we hear much talk about the importance of "free enterprise." This is an important aspect of freedom of choice. It gives people the freedom to start their own business and use the factors of production in such a way as to make a profit. Much of the American economic system is built on the foundation of this particular freedom.

EQUALITY OF OPPORTUNITY is another goal that is part of the American heritage. It is closely related to freedom of choice, because it says that all people should have approximately the same degree of freedom -- to exercise their rights as consumers, workers, and enterprisers.

* * *

The goal of ECONOMIC SECURITY means that we want the members of our economic society to have enough money to be able to buy adequate food, clothing, shelter, and other necessities. In a rich country like ours, where the average income per person is over $3,000 and personal Income per family is $10,000, it seems unnecessary and wrong to have people living in poverty and insecurity. This, of course, is why the American people established a social security system in the 1930's and why a "War Against Poverty" was declared in 1964.

In 1964, according to the Economic Report of the President, there were more than 30 million Americans living in poverty. Nearly half of them are children under 18 years of age. Such widespread poverty not only meant failure to achieve the goal of economic security for these Americans, but it also raised serious questions about whether we were achieving the goal of ECONOMIC JUSTICE in our society. Not everyone agrees on the meaning of fairness and justice in our economic life, but it is a goal that nearly everyone feels is important to define and work toward. The Economic Opportunity Act of 1964 and some of the recent civil rights laws have aimed at improving economic justice for negroes and other groups of Americans.

* * *

Finally, there is one economic goal that is not limited to the boundaries of the United States itself, but spreads overseas to other countries. This is the goal of INTERNATIONAL BALANCE. We want to maintain a strong and balanced relationship in our foreign trade and international payments. Failure to achieve this goal not only causes serious economic problems at home and abroad, but also increases international tensions that threaten world peace.

Question: Which one of the seven goals listed above is most important for our economy? Can you think of some other important goals that were left out?

* * * * * * * * * *

## Today's Lesson in Brief

Important goals of the U. S. economy are Full Production, Stable Growth, Freedom of Choice, Equality of Opportunity, Economic Security, Economic Justice, and International Balance. When our economic system comes reasonably close to achieving these goals on a continuing basis, we judge the system to be working well and serving the needs of the American people.

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## "The Business of America is Business"

Calvin Coolidge, who was President of the United States in the 1920's, is well-remembered for making the statement that appears as the title of today's lesson. "Business" is an important part of the economic life of our nation, accounting for 80% of our total production and income. BUSINESS FIRMS, hoping to make profits, make many of the buying and selling and operating decisions that determine production, employment, and marketing in our economy. One form of business organization, the CORPORATION, receives nearly four-fifths of all business income and manages two-thirds of the nation's total production.

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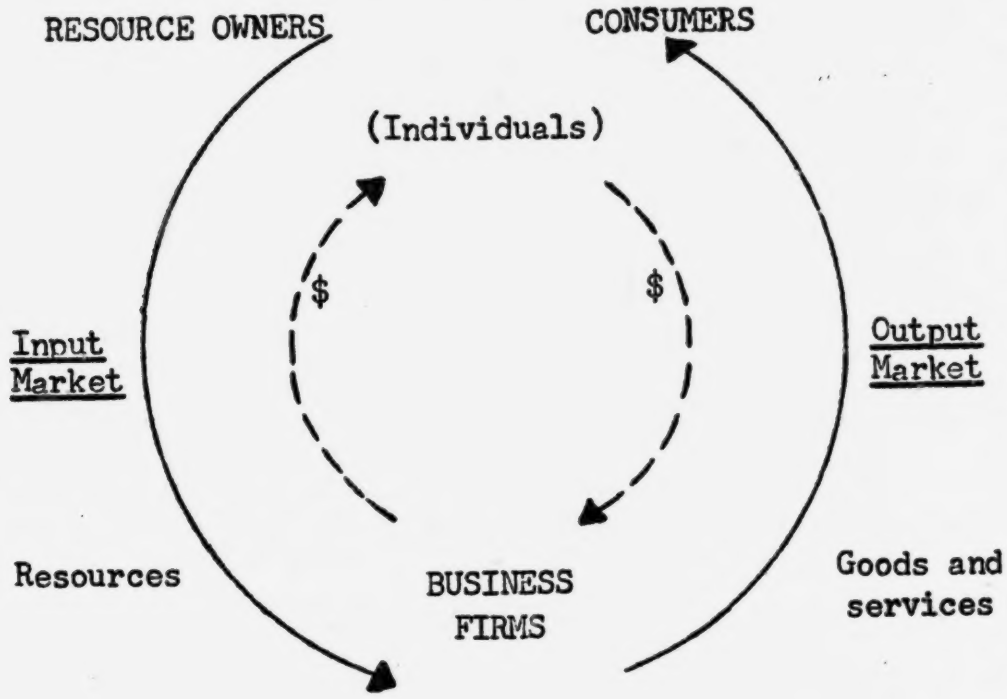
Business firms play a key role in the circular flow of economic activity, as shown in the simplified model below:




A business firm (or simply "business" or "company") buys resources of labor, land, and capital in the input market. It combines and coordinates all these resources to produce goods and services. And then it sells the goods and services in the output market.

Why is it that business firms are willing to take on all this responsibility and effort and risk? The answer is that they hope to make a profit. They expect to be able to sell the finished products for prices that are

high enough to be able to cover all their costs of operating the business and still have some profit left over. (Profit = Total Receipts - Total Costs).

The mainspring of business, the driving force that makes business run, is the profit motive. Business firms produce goods and services not "to satisfy human wants" but to sell them in the market in order to make profits for the owners and managers of the business, and to provide investment funds for expanding the business. Generally speaking, in order to make profits the firm must produce goods and services that satisfy the wants of consumers. This system of production also provides jobs and incomes for workers and for other resources.

* * *

Not counting farms and self-employed professionals like doctors and lawyers, there are about five million business firms in the United States. One million businesses are organized as corporations; nearly one million are partnerships; and three million are sole proprietorships. (If we included farms and professionals who sell their own services, the number of proprietorships would be nine million; and the total number of businesses in the country would be over 11 million.)

Most businesses are small, employing fewer than four workers. Many of these firms make no profits, and thousands of them "go broke" every year. The average life of a business firm in the U.S. is seven years. The big corporations, however, are generally much more stable, and earn more profits.

* * *

Table I shows the business receipts of proprietorships, partnerships, and corporations in 1963. (Businesses organized as producer and consumer cooperatives, are not included in the table.)

Table I. BUSINESS FIRMS AND BUSINESS RECEIPTS IN 1963

| | Number of Firms | Business Receipts |
|---|---|---|
| Sole Proprietorships | 9,136,000 | $182 billion |
| Partnerships | 924,000 | 72 billion |
| Corporations | 1,323,000 | 949 billion |
| (Largest 500 industrial corporations | | 245 billion) |

SOURCE: U. S. Department of Commerce, Pocket Data Book USA 1967, p. 239; and Fortune Directory 1964, p. 1.

* * *

Some corporations have grown to tremendous size. They are responsible for the production and sales of billions of dollars of goods; together they employ millions of workers; and they are "owned" by millions of stockholders (Table I shows that the 500 biggest industrial corporations actually do more business than the total sales of all 9,000,000 proprietorships put together!)

General Motors corporation, for example, had assets of $12.5 billion in 1965 and sold $20.7 billion worth of automobiles, trucks, diesel locomotives, and a variety of other goods. Three-quarters of a million workers were employed by GM. Profits after taxes totalled $2.1 billion. This was a 10.3% profit rate figured as a percent of sales, and it was a 25.8% profit rate figured as a percent of invested capital.

General Motors is the biggest industrial corporation in the nation. But the Ford Motor Company, Standard Oil of New Jersey, and General Electric are giants, too. Each had more than five billion dollars of sales receipts in 1965. The American Telephone and Telegraph Company (you may have read about AT&T) had assets of $32.8 billion in 1965, operating revenues of $11.1 billion, net income of $1.8 billion. The corporation employed 795,294 workers and had over two million "owners" (that is, stockholders).

Four large corporations -- General Motors, Ford, General Electric and U. S. Steel -- had more employees in 1965 than the entire Federal government, not counting the Department of Defense. General Motors alone handled more money (receipts and expenditures) than the state governments of Ohio, Pennsylvania, Michigan, Illinois, New York, California, and Texas all combined.

* * *

What is a corporation? The simple answer is that a corporation is a form of business organization that gives the firm a separate legal existence. Money to set up and operate the business comes from people who buy shares of stock. These are the Stockholders, and might be thought of as the owners of the business. They are risking the money they "invest" in the corporation, and their hope is to receive dividends (regular payments on each share of stock they own) and also to make capital gains ("profits" from increased market value of the stock) if and when they choose to sell their shares to somebody else.

Under the corporate form of business organization, basic policies are set by the Board of Directors, whose members are elected by the stockholders. The Board hires a President, Treasurer, and other members of "management" as Officers to run the corporation.

There is also a more complicated answer to the question: What is a corporation? Some economists believe that the giant corporation is really a new economic institution; one that replaces the supply and demand system

of market competition. They point out that General Motors is really more like a government agency -- TVA, or the State of New York, or the Department of Defense -- than like the corner grocery store or the small tailor shop or a construction firm. It will be interesting to watch the giant "quasi-public" corporations during the next 20 or 30 years, to see how they affect the nature and performance of our "mixed-capitalism" economy.

* * * * * * * * * *

## Today's Lesson in Brief

The business sector of our economy accounts for 80% of our total production. Business firms assume the responsibilities of coordinating production in hopes of making a profit. Some business corporations have grown to tremendous size, handling billions of dollars and employing hundreds of thousands of workers.

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## Government's Role in Our Economic Life

When we speak of "Government" in our study of economics, we mean all of the units of government -- local, state, and federal. Citizens of the community, the state, and the nation use these governmental units to make rules, exercise controls, and engage in activities that influence the production of goods and services and the distribution of income in our economy. Government accounts for more than 20% of our Gross National Product.

* * * * * * * * * *

When you hear the word "Government", what do you think of? A fire truck or police car rushing to the rescue? Teachers helping you learn math and economics? The U.S. Congress in Washington, D.C. A job counselor in the Ohio State Employment Service? The TVA producing electric power? A tax investigator from the Internal Revenue Service?

We'll use the word "government" in this course to include all units of government -- local, state, and federal. These are political agencies, set up by citizens to handle certain jobs. There is one unit of federal government, 50 state governments, and more than 90,000 local governments! (Local government includes cities, counties, townships, special districts, and school districts. In the 1962 Census of Governments, there were 37,000 separate school districts in the United States.)

What kinds of services do these governmental units perform for their citizens? They put out fires, build roads, fight wars, operate schools, and handle hundreds of other assignments. (They also collect taxes to pay for all these activities -- as your parents well know!)

Looking at government from an economic point of view, we can think of government activities under four main headings:

1-- Making rules (civil and criminal laws, public health regulations, city zoning ordinances, etc.);

2-- Producing goods and services (building roads, operating schools);

3-- Transferring income (taxing, borrowing, paying social security benefits and welfare assistance to needy families);

4-- Stabilizing the economy (raising and lowering taxes to stimulate employment and production and to prevent inflation).

* * *

Government has always played an important part in the economic life of the American people. In the past 35 years, however, government's role has expanded. Taxes and government spending -- at all levels of government -- have increased greatly. Government purchases of goods and services (part of our Gross National Product) went up from $8.5 billion in 1929 to $153 billion in 1966. As a fraction of GNP, government purchases of goods and services rose from less than one-tenth to more than one-fifth. Today government absorbs about 20% of our total GNP. More than 10 million men and women are employed by government, three-fourths of them by state and local government.

* * *

Why is government involved in the four kinds of activities listed above? The reason that government makes rules and regulations is pretty obvious to most people. They're necessary in order to maintain order and stability for 200 million people in a huge country stretching 3,000 miles from the Atlantic Ocean to the Pacific, and 1,500 miles from Canada to Mexico. As our economic and social life grow more complex, we can also expect that government involvement in our economic and social life will probably increase.

But why does government get involved in producing goods and services, transferring income, and stabilizing the economy? One way to answer this question is to begin by realizing that we live in a democracy, and that if government gets involved in certain activities it's because the people apparently want it that way. The citizens of the United States presumably turn to government to help solve certain economic problems because they feel that government can help bring about better solutions than we can get without government participation.

What are these economic problems? Basically, the same ones that every economic society faces:

Deciding:

-- how much to produce;

-- what specific goods and services to produce; and

-- how to divide the income.

In order to get better solutions to these problems and specifically to achieve "maximum employment, production, and purchasing power" the people of the United States -- through the Congress -- have made it the responsibility of the federal government to "Use all practicable means" to promote these objectives. The Employment Act of 1946, which Congress passed with strong support from both Republicans and Democrats, contains this provision. (The Great Depression of the 1930's had left many people with the idea that our economy would not automatically achieve these goals without active help from the government.) The 1964 cut in federal income taxes was passed for the purpose of encouraging full employment and growth, and according to Business Week magazine, it had exactly the right effect.

* * *

Government is involved in "producing" highways and schools because the American people want more and better transportation and education than they get individually through the private (market) sector of the economy. Because the federal government is responsible for "the common defense", it "produces" a large Army, Navy, and Air Force establishment. (And spends over $60 billion of taxes each year to pay for it.)

Table I shows the amount of government spending, by function and level of government, for 1965-66.

Table I. DIRECT GENERAL EXPENDITURES BY GOVERNMENT, 1965-66

| Function | Level of Government and Amount Spent (billions of dollars) | | |
|---|---|---|---|
| | Local | State | Federal |
| National Defense & Space | - | - | $66.7 bil. |
| Education | 25.7 | 7.6 | 1.5 |
| Highways | 4.1 | 8.6 | .1 |
| Public Welfare | 3.6 | 3.1 | .2 |
| All other functions | 20.3 | 9.9 | 38.0 |
| TOTAL DIRECT EXPENDITURES | $53.7 + | $29.2 + | $106.5 = $189.4 bil. |

SOURCE: U. S. Bureau of the Census, Governmental Finances in 1965-66, GF No. 13, 1967, p. 23.

(The table doesn't show all government expenditure. It leaves out the insurance trust funds like the federal social security program, state liquor store receipts, and local utility revenues from city-owned water systems.)

Boxes have been drawn in the table to show that $66.7 billion was spent by the federal government on its biggest function, national defense and space research. Local governments spent $25.7 billion on their biggest function, education. And state governments spent $8.6 billion on their biggest single function, building and maintaining highways.

Where does all this money come from? Altogether, government collected $161 billion in general taxes in 1965-66, plus $65 billion of insurance trust revenues and miscellaneous other receipts.

* * *

We have seen how government spending and taxing affect the overall level of the economy and also the specific goods and services that are produced. Taxes and spending also affect the distribution of income. "Progressive" taxes such as the federal individual income tax take a higher percentage of income from the rich family than from the low-income family. Because sales taxes generally are "regressive" they take a higher percentage of income from poor families. Government transfer payments -- such as public welfare assistance and unemployment compensation benefits -- give more money to the poor than to the high-income families. These transfer payments help reduce some of the inequalities in the distribution of income in our economy.

* * *

The study of government's role in the economy is interesting and complicated. Many people disagree about what the government ought to be doing in the economy, and there are many heated arguments on the subject. If you will read the newspapers carefully during a political campaign -- especially when there is a presidential election -- you will see how important the economic issues can be in our national life. And in your own community, note the pro's and con's you hear when the time comes to vote on local property taxes.

* * * * * * * * * *

## Today's Lesson in Brief

Local, state, and federal government play an active role in our economic life. Altogether they handle over 20% of our Gross National Product. Taxing and spending by government affect the overall level of economic activity, the particular kinds of goods and services that are produced, and the way income is divided.

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## The Role of Labor Unions

Although labor unions have existed in the United States for more than a century, they did not become a solid fixture in our economy until the 1880's; and membership was small until the 1930's. Unions were organized to give workers a stronger voice in dealing with employers regarding wages, hours, working conditions, and job security. Today 18 million men and women, about one-fourth of all American workers, belong to unions. The AFL-CIO is a federation of labor unions that serves as a national spokesman for union members.

* * * * * * * * * *

"Organized labor" -- sometimes called "the labor movement" -- is an important institution in the American economy. These terms refer to the organization of workers into unions, and then linking these unions together through cooperation, and sometimes formal organization and federation.

A labor union is an association of employees. The purpose of unions is to give men and women who work for pay a stronger influence in dealing with employers. Their motto is: "Through union, comes strength". They use this strength in efforts to gain higher wages, better working conditions, more control over their jobs, and improvements in the social and economic life of the working man.

* * *

We can make good use of history as well as theory and statistics to help us understand the institution of unionism as it exists today. Let's look back in history to see the kind of world your grandparents were born into.

* * *

What was it like to be a worker in America in 1900, some 70 years ago? The following description of the world of work at the turn of the century suggests some reasons why workers felt a need to join together into unions.

-- "The average worker made about $10 a week for a 60 hour week. Some textile workers put in as many as 84 hours. More than two million children, some only 12 years old or even younger, worked long hours, frequently at night, for which they were paid no more than 60¢ a day.

-- "For working 12 hours a day -- seven days a week -- garment workers were paid three or four dollars a week, out of which they often had to pay fines to their employers for talking, smiling, or breaking needles.

-- "The only relief from work came with the lay-off or the firing. And then came the desperate hours of search to find some work, any work -- at any pay -- just to stay alive.

-- "The places where garment workers were employed were dim, damp, disease-breeding places of labor called sweat shops. There were no regular hours; no minimum wages; no paid holiday's; no vacations; and no human dignity."

* * *

The following working rules were imposed on the employees of a Chicago department store in the years just preceding the Civil War (quoted from a handbook for employees, distributed in 1857):

-- "Store must be open from 6 a.m. to 9 p.m. the year around.

-- "Each employee must not pay less than five dollars per year to the church and must attend Sunday school regularly.

-- "Men employees are given one evening a week for courting and two if they go to the prayer meeting.

-- "The employee who is in the habit of smoking Spanish cigars, being shaved at barbers, going to dances and other places of amusement will surely give his employer reasons to be suspicious of his integrity and honesty."

* * *

Question: How do you think a worker today would feel about the conditions and rules described above?

* * *

Attitudes regarding workers and unions were quite different in the early 1900's than they are today. When railroad workers were trying to build a strong union and bargain with management over wages and working hours, the president of the railroad in 1903 made the following statement:

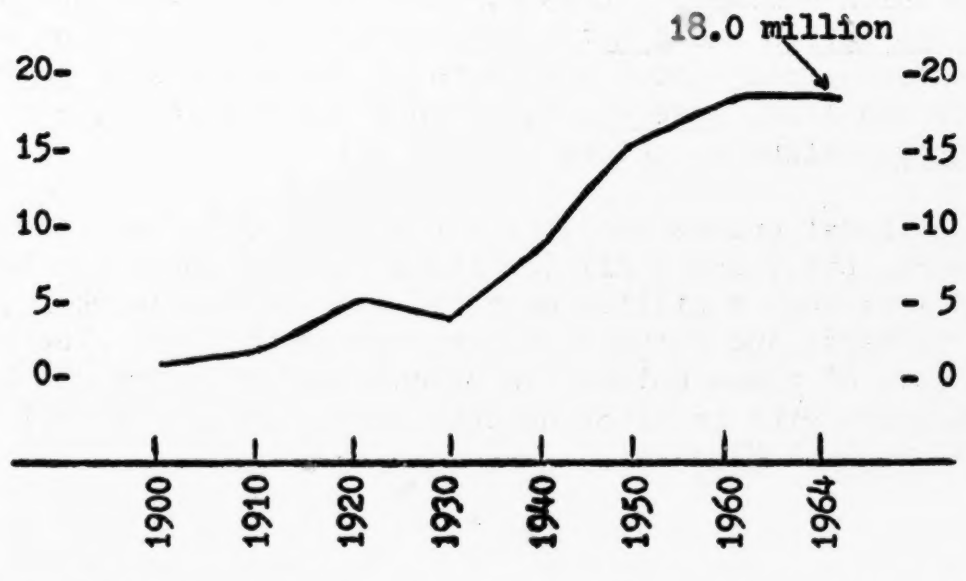
"The rights and interests of the laboring man will be protected and cared for, not by the labor agitators, but by the Christian men to whom God in His infinite wisdom has given control of the property interests of the country. Pray earnestly that the right may triumph, always remembering that the Lord God Omnipotent still reigns and that His reign is one of law and order, and not of violence and crime."

* * *

Throughout most of our nation's history, business and government both opposed labor unions -- sometimes using the police, National Guard, and armies of "private detectives" to break up strikes and prevent efforts to organize unions. The individualist outlook of the American people was another factor that prevented unions from being formed. For many years, public sentiment was definitely not in favor of labor unions. As a result, union membership was small.

Chart I shows total union membership in the United States from 1900 to 1964.

Chart I. TOTAL UNION MEMBERSHIP IN THE UNITED STATES 1900-1964
(In millions)




SOURCE: Historical Statistics of the United States, p. 97f. For 1960 and 1964, Statistical Abstract of the U.S. 1966, p. 246.

Notice the sharp increase in members during the 1930's and 1940's. How is this to be explained?

Two factors provide most of the explanation for the growth of union membership after 1930. First, our economic system suffered its most severe breakdown in history. The Great Depression caused millions of workers to be unemployed. From 1932 to 1935, the unemployment rate never fell below 20%, and in the worst year, 1933, one worker out of every four was jobless. The American people lost confidence in the business system and looked for new ways, including unionism, to improve the economy.

The second factor was a change in the attitude of government. President Franklin Roosevelt publicly stated that "If I were a worker in a factory, the first thing I would do would be to join a union." In 1935, Congress passed the National Labor Relations Act (Wagner Act), guaranteeing workers the right to organize unions and bargain collectively with employers,

without interference from management. Employers now were legally required to bargain in good faith with any union certified as a bargaining agent.

There have been many changes in the law dealing with unions since 1935, and some of these new laws have been designed to limit the power of unions and also to make unions more responsible to their members and to the public. But today, unions are a solid fixture in our economic world. As President Dwight Eisenhower said in the 1950's, "Only a fool would try to deprive working men and working women of the right to join the union of their choice."

Even today, however, only 18 million men and women, about one-fourth of all workers in the United States, belong to unions. But totals can be misleading. In certain industries unions are very strong and almost all workers are union members. In 1964, more than three-fourths of all workers in the transportation and construction industries were union members. At the other extreme, only about one-tenth of the workers in service industries, state and local government, finance and insurance, and retail and wholesale trade belong to unions.

A few national unions are very large. In 1964, the Teamster union (truck drivers, etc.) had a million and a half members; the Automobile Workers had more than a million members; and the Steelworkers, Machinists, Electrical Workers, and Carpenters were not far behind. The size and influence of some of these unions can be compared with the giant corporations that they bargain with in labor negotiations, such as General Motors, Ford, U. S. Steel, General Electric.

* * *

What is the structure of organized labor in the United States? In general, there are three "layers" of union organization. First there is the local union that exists within a particular factory or office building. Above the local is the national or international union (some are called "international" because they include Canadian workers). It is the national union that has much of the collective bargaining power, especially in an industry like steel or automobile production. At the top is the AFL-CIO federation. The AFL-CIO (American Federation of Labor and Congress of Industrial Organizations) is not really a union, and does not engage in collective bargaining with employers. It is an association or federation of more than 100 unions, and serves as the chief spokesman for organized labor on such national issues as federal taxes, the war on poverty, and the election of the President and members of Congress.

At the state and local level, there are labor councils or "central bodies" that represent organized labor in political affairs, educational activities, and a variety of other areas. The Ohio AFL-CIO has its offices and staff in Columbus.

* * *

What is the future of labor unions in America? This is a question that many people are asking. Some say that unions played their most important role in the 1940's and 1950's and now there is less need for them. With the spread of automation, however, many workers have turned to their unions to help protect their jobs and incomes. They feel that unions will play an important role in helping them achieve their goals of economic justice and economic security.

There are many who predict that unions will continue to play a major role in determining wages and working conditions and will assume positions of great importance in new fields -- particularly with white collar workers. Unions of public school teachers, for example, have grown up in recent years and have attracted attention across the country.

* * *

Question: Do your parents, or other members of your family belong to a union? If so, what views have they expressed about the advantages and disadvantages of belonging to a union?

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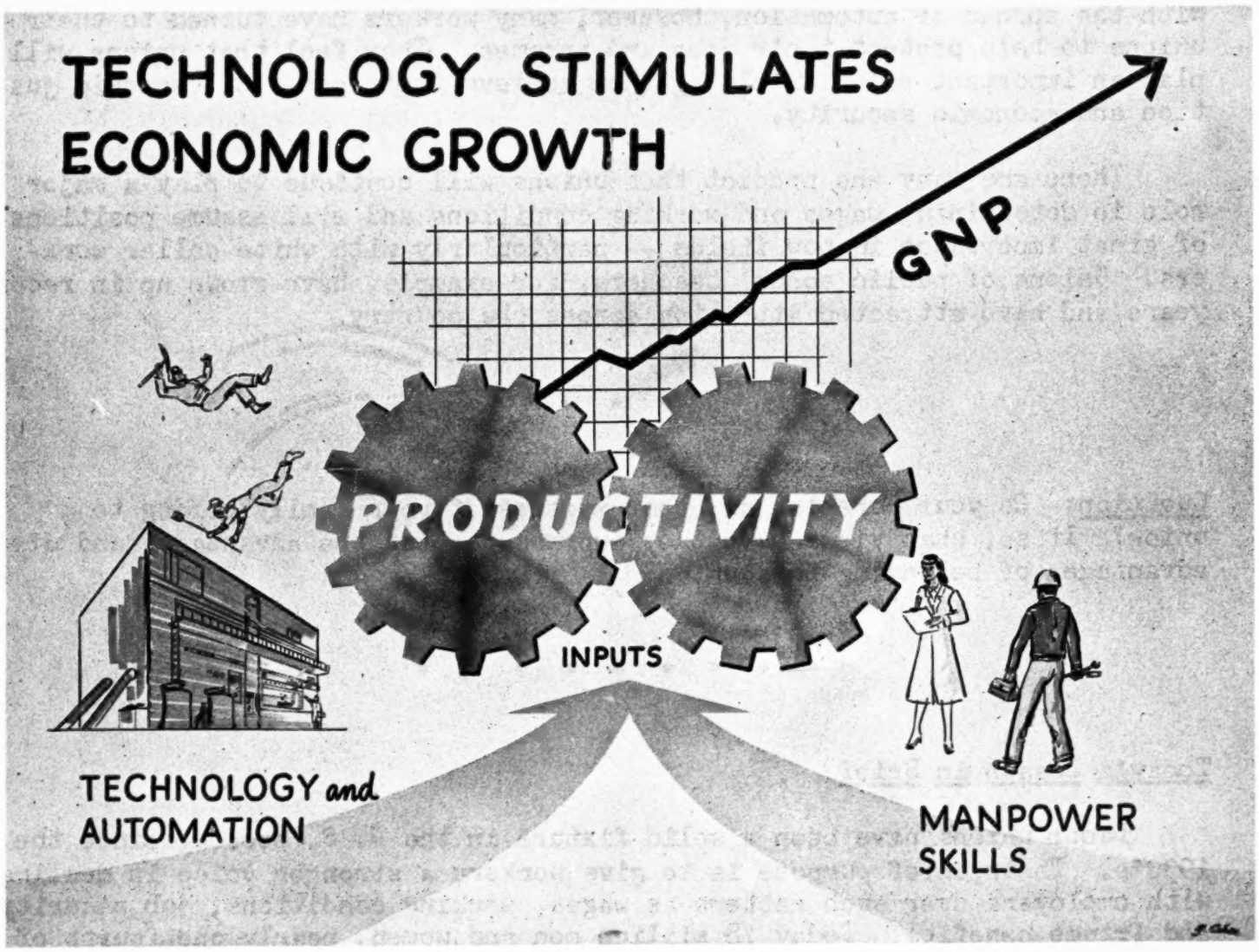
## Today's Lesson in Brief

Labor unions have been a solid fixture in the U. S. economy since the 1930's. Their chief purpose is to give workers a stronger voice in dealing with employers over such matters as wages, working conditions, job security, and fringe benefits. Today 18 million men and women, nearly one-fourth of all American workers, belong to unions. Workers are represented by local unions, national unions, and by the AFL-CIO, which is a national federation of unions.




Technology creates both opportunities and problems for labor unions and their members. A growing economy with rising GNP creates more jobs. Increased productivity often brings higher wages. However, technological change and greater productivity may sometimes reduce the number of workers employed. Advancing technology frequently requires workers to learn new manpower skills.

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## Consumers of Abundance

There are 60 million consumer households in the U. S. economy. Together they spend nearly half a trillion dollars a year for the purchase of goods and services to satisfy the needs and desires of 200 million Americans. Consumer spending plays an important role in the Circular Flow of Economic Activity by influencing the OVERALL LEVEL of market demand, and by sending "dollar messages" to business firms telling them which PARTICULAR goods and services to produce for sale in the market.

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The American people have been called "the consumers of abundance". A decade ago, one of our country's best-known economists, John Kenneth Galbraith, wrote a famous book entitled "The Affluent Society". (Affluent means "abundant" or "rich".)

Our economy produces food, housing, clothing, cigarettes, liquor, and other goods literally by the tons and megatons. We manufacture millions of automobiles, TV sets, household appliances, and gadgets each year. And we produce transportation services, entertainment, and many other services valued at billions of dollars.

Today, 90% of all households in the United States have a TV set -- and nearly as many have flush toilets and bathtubs or showers! Four out of every five households own a car and have telephone service; 96% have an electric refrigerator; 72% have a washing machine.

In most of the countries of the world, only the richest 2% or 3% of all households are able to own a car and refrigerator and TV set. In the United States, with only 6% of the world's population, we produce and consume between 30% and 40% of the world's output of goods and services. By almost any standard you can think of -- historical, comparison with other countries, or the physiological needs of humans -- we are truly an affluent society and "economy of abundance".

* * *

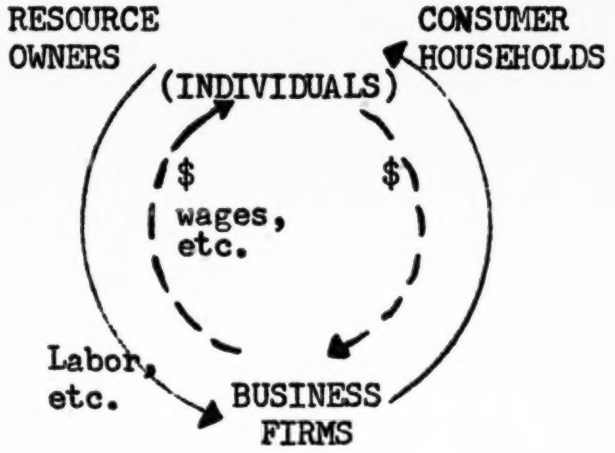
There is a saying: "The proof of the pudding is in the eating". Our abundance of consumer goods and services is generally considered to be positive proof that our economic system is the most successful the world has ever known. Some economists believe that "the single purpose of all economic activity is consumption"; therefore the quantity and quality of consumer goods produced is the best standard by which to judge the performance of our economy. (We may want to dispute this claim later in the course.)

In any case, consumption is a very important part of our economic life. Everyone must consume in order to live. (Some people live in order to consume.) Some people live "higher on the hog" than other people -- that is, the rich have vastly more consumer goods than the poor. We know that within our affluent economy, with all its abundance and wealth, some 30 million Americans still live in poverty.

* * *

In 1966, there were nearly 60 million consumer households functioning in the American economy. (A household includes all persons who occupy a house, apartment, room, or group of rooms as separate living quarters. A household can consist of one person or a whole family.) Since the population was close to 200 million, the average size of each household was about three and one-third persons. (Divide 200 million people by 60 million households, and the quotient is 3.3 consumers per consumer household.)

How did the 60 million households function in the economy? That is, what do consumer households do in our economy? What functions do consumers perform?




The Circular Flow model shows that consumers spend money (this flow is indicated by a broken line); and consumers obtain goods and services (indicated by the solid line), which they use to satisfy their needs and desires.

Let's look at each of these functions in turn.

Consumers in 1966 spent $465 billion dollars to buy goods and services. (You can refer back to this figure in Table I of lesson #11 on Gross National Product statistics.) That's an average of nearly $8,000 of consumer spending per household. They spent 45% of this on NON-DURABLE GOODS such as food, clothing, and tobacco. They spent 40% of their consumer dollar on SERVICES such as household operations, transportation, and medical care. And the remaining 15% of consumer spending was for DURABLE GOODS such as automobiles and furniture and household equipment.

Where did the households get the money needed to purchase all these goods and services? Although some of their purchasing power came from past savings, most of it was current income. Total personal income in 1966, for everyone in the country, amounted to $580 billion. Two-thirds of this personal income came from wages and salaries received for work that was done during the year.

As the Circular Flow model shows, employed workers earn wages and salaries, and then in their capacity as consumers, they spend much of it for the purchase of goods and services. They also pay taxes, save a little, and make other minor outlays. There is an important connection between earning and spending. You can't spend money in the consumer-goods market unless you have money; and the most important source of purchasing power (money) is current income from wages and salaries. A lesson to remember is that consumers are able to perform their spending function only if they have money to spend.

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What are the consequences of consumer spending? When consumer households spend money in the market, they create an "effective demand" for goods and services. They exchange money for goods, and this stimulates business firms to produce more goods. (Note: we are using the term "goods" to include both commodities and services.) Spending in the market "greases the wheels of commerce and industry". In plain language, this means that when businessmen are selling their merchandise, they continue to produce more goods. And this means that workers and other inputs continue to be employed.

Not only does consumer spending create a demand for goods, which stimulates production, which in turn creates employment opportunities. Spending is always for particular goods and services. Therefore, consumer spending in the market provides a system of signals or messages -- telling business firms to produce more of the particular goods and services that consumers say they want, and less of the goods that are piling up on the shelves and in the warehouses. When a consumer spends five dollars to buy a blue, size medium, short-sleeve shirt, in effect he is "voting" in favor of continuing the production of blue, medium, short-sleeve shirts. His dollar votes will influence the way resources are used in our economy.

* * *

This brings us to the second major function of consumer households: to obtain goods and services for use in satisfying wants. We have already noted that people must consume in order to live. Now, it is time to note that **how we live** will be greatly influenced by the quantity and the quality of the goods and services we consume. This is a paraphrase of the food faddist's credo: "We are what we eat". If we spend our consumer dollars for candy, coke, cosmetics, liquor, cigarettes, toy guns, thrill magazines, gadgets, and pills, we create a certain kind of world for ourselves and for our neighbors.

In our affluent society we have the economic power to produce and consume almost anything we choose. We have the freedom, within broad limits, to choose whatever we like. The kind of world we live in will depend to a very great extent on how wisely we choose and how well we use our freedom.

* * *

Questions:

1. How wisely do American consumers use their affluence and freedom?
2. Do we produce the "right" kinds of goods and services?
3. Why is "a good allocation of resources" important to your economic well-being?
4. What are some of the forces that influence the total amount and the particular pattern of consumer spending in the U.S. economy?

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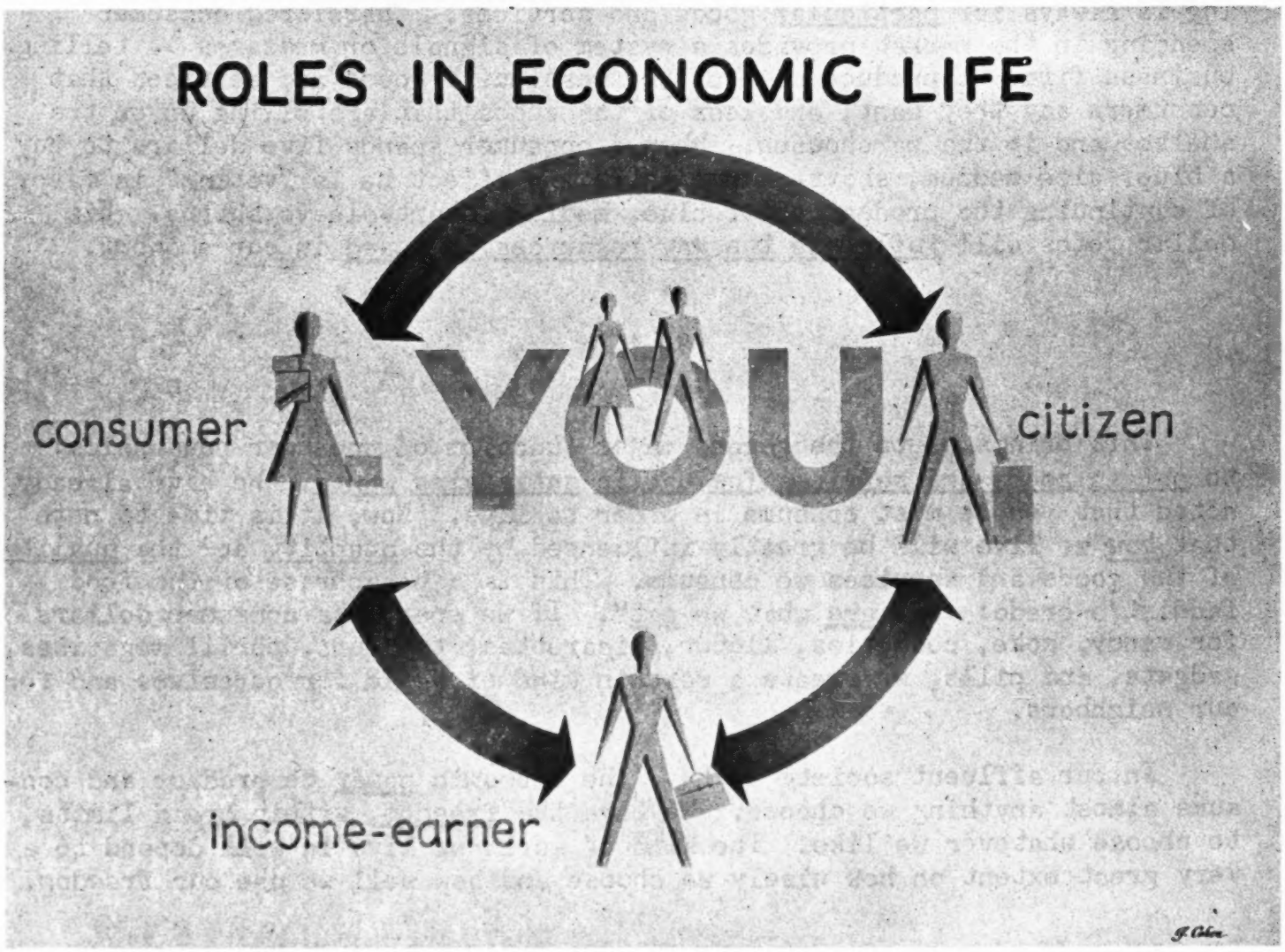
Today's Lesson in Brief

The 60 million consumer households that function in our American economy exert a great deal of influence through their annual expenditures of nearly half a trillion dollars. Consumers perform two major functions: they spend money in the market; and they obtain goods and services for use in satisfying human wants. The total amount of spending, and the particular pattern of spending influence the overall level of output and employment and influence the way our economy's resources are allocated in the production of particular goods and services.

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## The Knowledge Explosion: Technology, Automation, and Cybernation

"Knowledge is power."

-- Francis Bacon

The application of scientific knowledge to the production of machinery and equipment, and goods and services for consumers, is one of the greatest "inventions" in the history of man. Rapidly improving technology in the mid-20th century makes it possible to produce new goods, more goods, and better goods. Technological and economic change also create adjustment problems for individuals and for society.

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Throughout history, man has been a "seeker of knowledge" for many reasons. Man wants to know, simply for the sake of knowing. Just as men climb mountains because the mountains "are there", men also study the heavens and the earth and the creatures that inhabit the universe. Why? Because man is curious, and wants to know.

But man is also very practical. He wants to survive on the planet earth, and he wants to extend his control over his environment. He wants to expand his freedom and power. And to do this, he must have knowledge.

Think of the power that man gained when he learned how to make fire, how to fashion cutting edges on stones, how to use a lever and a wheel and a bow and arrow. Man took a giant step forward in his cultural evolution when he "invented" agriculture and learned to use wooden tools and fertilizers and animal power to grow crops. And he made another leap forward when he learned to harness steam and electricity and petroleum to power machines made of iron and steel.

* * *

The great American economist Thorstein Veblen, who wrote many books and scholarly articles during the early 1900's, called technology "the life process of man". Certainly man's knowledge of how to make and use tools has played a tremendously important role in the life of man. In the United States today, science and technology seem to dominate our lives, creating and recreating new worlds for us -- full of opportunity and promise, but also posing problems and dangers. There is perhaps no better example than atomic and nuclear energy. On one side of the coin is power; on the other side of the same coin is the bomb.

* * *

If a simple answer could ever be given to the question: Why is our economy so productive?, the answer would have to be: Because of our advanced technology. We know how to make tools and use them in production. Without modern industrial technology, we would be a nation of primitive people fighting a constant struggle for bare survival -- and many of us would lose the struggle and starve to death, as thousands do every day in the underdeveloped countries of Asia and Africa.

* * *

In recent years, technical knowledge has been increasing rapidly. According to a report published by the Joint Economic Committee of the U.S. Congress, "as much technical knowledge will be developed in the next 30 years as has been accumulated in the entire past history of mankind". As much new technical knowledge will be discovered (or produced) between 1966 and 1996 -- the years of your education, training, and entry into the labor force -- as in all the preceding thousands of years of man's existence on this planet combined. The report went on to say that we produce, in this country alone, approximately 25,000 technical papers every week, along with 400 books and 3,500 articles.

Not only is technology advancing rapidly, the rate of change is also increasing. This should not be surprising. The more knowledge we have and the more tools we have, the more ways we can combine existing knowledge and tools -- and create still more knowledge and tools! This is one of the most important principles of economic growth: Technology is cumulative (we keep adding to knowledge inherited from the past), and the pace of technological progress is accelerating. Each year in the United States we spend more than $20 billion on "Research and Development" (R&D) to assure that technical knowledge keeps on expanding to meet the needs of a growing economy.

* * *

What are the effects of technological change? The first is to expand productivity -- our power to produce goods and services. Improvements in technology become embodied in new machines and equipment (capital goods); and through education and training, they become embodied in human resources. As the quality of capital and manpower resources improves, we are able to produce more output with a given quantity of man-hours and capital inputs.

The second effect of technological progress is to generate change. In our next lesson we will focus attention on change and some of the problems that are created by technological progress. Now, let's take a closer look at the different forms that modern technology assumes and the effect of technological improvements on productivity and growth.

* * *

There are a couple of fancy names that have made their way into our language in recent years -- first cousins in the technology family, so to speak. One is automation. The other, still strange and unfamiliar to many people, is cybernation.

* * *

"Automation" comes from the words "automatic" and "operation". The term is used to describe a mechanized process of production, in which equipment is used to regulate and coordinate the quantity and quality of production. In other words, automation is the use of machines to control other machines in production. It is one step beyond "mechanization" in terms of complexity. Automation is used to provide a continuous and integrated operation for a production system.

"Cybernation" is automation plus the electronic computer. Computers, in turn, are devices that perform, very rapidly, routine or complex logical, mathematical, and decision-making tasks. Computers are used for Calculation, Control, and Communication. An example of cybernation is the all-purpose robot, as in the TV program "Lost in Space". (Also Roda in "My Living Doll"; and would you believe Hymie, in "Get Smart"?)

* * *

Some writers have suggested that a "Cybernation Revolution" has taken place, meaning that recent changes in technology are so fundamentally different from previous industrial technology that we have entered into a New Era. In this evolving Cybernation Era, the muscle-power and manipulative skills that workers contributed to production in the past will cease to be valuable. Machines will take over much of the work that men and women used to do. In the future, some writers say, the only resources of humans that will have economic value will be brainpower. (What does this imply for schools? How is brainpower developed?)

Already, automated equipment has replaced men by the thousands in mining coal, weaving cloth, baking cakes, making steel, printing, oil refining, sorting bank checks, and doing hundreds of other jobs. Fourteen glass-blow-

ing machines, each operated by one worker, produce 90% of all the glass light bulbs used in the U. S. There is a single radio assembly line operated by two workers that produces what 200 workers formerly did. A fully automated plant in the Soviet Union manufactures aluminum pistons for heavy trucks with no manual labor whatsoever. One refinery in England processes enough crude oil in a day, using a total of six men on a shift, to supply nearly one-third of Britain's internal consumption of oil products!

Where will it all end? Will machines take over the world, and make slaves out of men? Or will man be freed from toil forevermore by making wise use of machines? If manpower is no longer needed in production, what will man do with his leisure time? Tune in, let's say, in 1987 -- and find out!

* * *

Discussion Questions.

1. Can you think of some concrete examples of tools or machines that were invented by combining simpler tools and machines that already existed?
2. List some advantages and disadvantages of automation. On balance, do you feel that automation and cybernation are good for the American people?
3. How can the knowledge you acquire help build a better life for you personally?
4. Is it possible to have too much knowledge? Too much power?

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Today's Lesson in Brief

Knowledge is power. The application of scientific and technical knowledge to production is one of the greatest inventions in the history of man. Technological progress, automation, and cybernation make it possible to produce new goods, more goods, and better goods. Technological and economic changes also create problems that individuals and society must try to solve.

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## Benefits and Burdens of Technological Change

"Technology has, on balance, surely been a great blessing to mankind -- despite the fact that some of the benefits have been offset by costs. There should be no thought of deliberately slowing down the rate of technological advancement. . . The task for the decades ahead is to direct technology to the fulfillment of important human purposes. . . and seek to make work more meaningful rather than merely more productive."

-- National Commission on Technology,
Automation, and Economic Progress

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The above quotation comes from TECHNOLOGY AND THE AMERICAN ECONOMY, the Report of the National Commission on Technology, Automation, and Economic Progress (published by the U.S. Government Printing Office, Washington, D. C., 1966, 115 pages).

The Commission was appointed in 1964 by the President of the United States, and was made up of 14 men and women representing education, business, labor, and other fields. Its job was to make a study of technological change, describe the principal effects on the economy and society, and make recommendations for programs and actions aimed at getting the greatest <u>benefits</u> from technological advancements and reducing the <u>burdens</u> of change on displaced workers.

Why was this "Automation Commission" set up? Why did the President of the United States feel that technology, automation, and economic progress were creating problems that required special attention?

* * *

First, there has been a widespread feeling among the American people that the pace of technological change has been quickening. Things seem to be changing so fast that we have trouble keeping up. Products become "obsolete" almost as soon as they're unwrapped and put into use. New machines are being installed almost every day, and new production methods put into practice. In the past 20 years, we have seen the introduction and spread of ball point pens, television, jet airliners, new medicines, air conditioning, transistor radios, miracle fibers for clothing, pesticides and fungicides, kitchen dishwashers, helicopters, frozen foods, space satellites, pills, electronic computers, and the laser. (Can you think of some additional new products that have come onto the market within your own lifetime?)

Second, there is a widespread public recognition -- to quote the Commission's Report -- "of the deep influence of technology upon our way of life". The American people have seen the promise of technology, and have also seen the dangers. Concern and fear have been expressed: fear of annihilation by the bomb; fear of mass unemployment; concern over air and water pollution and the destruction of our natural environment; and fear, as another author put it, that "technology has seized control of man's fate" and threatens "to destroy the essential human qualities" of man.

* * *

Let's look at some of the economic benefits of technological advancement.

In the past 20 years (post-World War II), our Gross National Product increased from an annual rate of $208 billion in 1946 to $740 billion in 1966. The market value of our output nearly quadrupled. The increase in physical output of goods and services, however, was not this great. Inflationary price increases following World War II and during the Korean War made the dollar value of GNP increase faster than actual production increased. Nevertheless, real GNP more than doubled between 1946 and 1966, after all the proper adjustments are made for changes in the price level. The average annual increase in real GNP was almost 4%.

What role did technological improvements play in the growth of our GNP? This is a very good question. Unfortunately it is not possible to give a simple answer. The expansion of technical knowledge enables us to build better machines and design more efficient production systems. It makes workers more productive and helps businessmen increase their managerial efficiency. Technological advances make it possible to produce entirely new goods and services -- such as television sets and TV coverage of news and sporting events -- and to produce more goods and better goods.

There is no satisfactory way to measure the contribution that technological progress makes to our economic growth. But we do have some economic statistics that help tell part of the story. First, we know that productivity -- output per man-hour -- increased at an average rate of 3.2% a year during the past two decades. We know that two-thirds of the growth in real GNP is the direct result of increased productivity. And we know that the main reason productivity grows is because of technological advance.

Technology and productivity do not change at the same rate in every industry or every sector of the economy. Productivity growth in agriculture, for example, has in recent years been nearly double the increase for the overall economy. Fifty years ago, one farmer produced enough food and fiber to feed and clothe 8 people. Today, one farmer produces enough to feed and clothe 33 people! Agriculture has undergone a technological revolution -- ranging from giant harvesting combines and mechanized cotton pickers to chemical fertilizers and insecticides. Farmers are becoming so productive and efficient that they are "producing themselves out of business."

This brings us to the other side of the picture: the burdens and costs of technological advance.

Improvements in farm technology wiped out nearly 4,000,000 jobs between 1947 and 1965. The number of farmers and farm workers declined from 8.2 million in 1947 to 4.6 million in 1965. Twenty years ago, one worker in seven was employed in agriculture. Today, only one-sixteenth of our civilian labor force is employed in farming. Between 1940 and 1967, while the total population of the United States increased from 130 million to nearly 200 million, the farm population declined from 30 million to 11 million.

In the coal-mining industry, technological and economic changes reduced the number of jobs from 450,000 in 1947 to 110,000 in 1965. One reason for this massive displacement of workers was the "Push-Button Miner" -- a mechanical giant three stories high and weighing nearly 800 tons. Manned by a crew of three workers, it cuts and loads 260 tons of coal an hour!

* * *

In 1963, a committee of the United States Senate held a series of meetings to discuss "the manpower revolution". One of the businessmen who spoke to the committee -- the board chairman of a large corporation that produces automation machinery -- had this to say:

-- "From a technological point of view automation is working; but the same thing cannot be said so confidently from the human point of view. (There are many) myths about automation. The first myth is that automation is not going to eliminate many jobs. Personally, I think automation is a major factor in eliminating jobs in the United States at the rate of more than 40,000 a week.

-- "A second myth is that automation will create jobs for workers, not only in running the machines, but in maintaining and building them. (But if workers were not replaced by automation) "there would be no point in automation".

-- "A third myth that needs to be laid to rest is the belief that those who lose their jobs to automation can be retrained and put into other jobs requiring higher skills and paying more money. (But) studies have shown ... many workers are just not retrainable, due to their levels of intelligence, education, and age.

-- "Still another myth is that workers replaced by automation in one part of the country can find jobs in other areas. The truth is that the workers thrown out of jobs are usually just those who are least able to move. They are the lower paid, the older, the unskilled. Either they cannot afford to move from an economic standpoint or they are psychologically incapable of beginning a new life in a strange area."

* * *

Where does all this leave us? Is automation good or bad for the American economy and the American people? The answer, of course, is that technological advance, automation, and cybernation have advantages and disadvantages. Automation increases our ability to produce goods and services, and it also displaces particular workers and forces people to change the way they work and the way they live. One important fact to note, however is that automation has definitely <u>not</u> caused the Unemployment Rate to increase in recent years. As a matter of fact, a careful look at the economic statistics will show that the Unemployment Rate in 1966 was at the <u>lowest</u> level in 15 years! After all the technological advance and automation in the 1950's and 1960's, the unemployment in 1966 still averaged 3.9% -- the only year since 1953 that it fell below 4%!

* * *

We can turn back to the statement quoted at the beginning of today's lesson for some words of wisdom and guidance regarding technological change. "The task for the decades ahead is to direct technology to the fulfillment of important human purposes ... (and) seek to make work more meaningful rather than merely more productive." This may prove to be a major challenge for the American people.

* * *

<u>Discussion Questions</u>

1. If you were a coal miner who was replaced by a machine, how do you think you would feel about automation? What would you do?
2. Discuss the four "myths" that were quoted on page 3 of the lesson. Do myths have any influence on economic policies and the performance of the economy?
3. The lesson states that GNP increased from $208 billion to $740 billion between 1946 and 1966, a 260% <u>increase</u>! Yet it was also stated that <u>real</u> GNP only <u>doubled</u> during the period. How do you explain the difference?

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<u>Today's Lesson in Brief</u>

Technological advance is an important cause of productivity growth and increased in GNP. But technology and automation also displace some workers. In the past 20 years, nearly half of the farm work force has been eliminated by technological and economic change, and three-fourths of the coal miners have lost their jobs. Yet the Unemployment Rate in 1966 was below 4% -- the lowest level in the past 15 years. Members of the National Commission on Technology, Automation, and Economic Progress feel that technological advancement should be encouraged, but special attention should be given to solving the human problems that are created by technological change.

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## Are Today's Skills Good Enough for Tomorrow's Jobs?

In the dynamic economy of the United States, change is always taking place in the number and nature of jobs in the manpower market. Technology and other forces cause some old jobs to disappear while creating new jobs. The changes that will take place in the manpower market during your lifetime will mean that you are likely to have three, four, or even more entirely different types of jobs during your years of employment. Continuing education and training will be necessary to keep your work skills up to date, so you can take advantage of changing employment opportunities.

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In many cases, your parents did not have the opportunities for education and training that are available to young people today. Yet, many have been able to get and hold jobs without a great deal of additional education or training. Can you safely assume that "what was good enough for Mom and Dad will be good enough for me"? Don't bet on it!

The future will be different from the past. Our labor force is changing rapidly in composition and the amount of education and training that every type of worker has is increasing. However, because of the rapid nature of change in our labor force, it's hard to predict the exact type of education and training that will provide you with the specific skills needed for the jobs of the future. The fact is that not even the panel of vocational education experts set up by the President of the United States* could answer the question: "What skills should people be trained for so they can be usefully employed 10 years from now"? We have reached a point in our economic life where we can't really tell whether a given form of training will carry a man or woman as much as 10 years in time.

* * *

Let's look at the future of education and training for our changing labor force through the eyes and voice of a girl named Susie. The story could very well concern itself with Joe, Pete, or Bill because what happens to Susie in tomorrow's manpower market could happen to the boys in this class as well as the girls. As you read this case, ask yourself:

1. What would I do if I found myself in Susie's situation?
2. What "mistakes" did Susie make?
3. How can I avoid the situation that Susie is in?
4. Who (or what) is to blame for what happened to Susie?

* * *

*A 24-page summary of the Panel's 1963 report, Education for a Changing World of Work, was published by the U. S. Government Printing Office.

Susie, a ninth grade student in Everytown Junior High School, in the Spring of 1969 had come to the office of Mr. Collins, the school's guidance counselor, to discuss her high school program for next fall.

In talking to Susie, Mr. Collins recalled that Susie's mother had asked, "What's going to happen to Susie when she gets out of high school? Is she just going to be pushed into marriage because she has nothing better to do? I hope she has a chance to work out her own future and take time to decide what she wants to be."

With this in mind, Mr. Collins said, "You know, Susie, around here one of the best jobs a girl can get is in an office. In this town we need people who can type and keep books and manage offices. If you take the commercial subjects, I don't think you'll have any trouble getting a job when you graduate."

"Well, that sounds all right," said Susie. "What do you think I should take?"

"You are required to take English, social studies, and physical education. You could also take some home economics, and of course typing, shorthand, and bookkeeping." So they laid out a program in which about a quarter of her high school time would be spent on commercial subjects.

Three years pass, and in 1972, Susie graduates. Now her parents say, "We don't think you should get a job yet. You ought to go to junior college."

So Susie goes to junior college. There she spends about a third of her time on commercial subjects. She is good at them, and she likes them. Her spirit and her willingness to learn make her well liked by her teachers and a genuine credit to the college.

Two more years go by, and in 1974 she graduates and takes a job with the J. B. Jones Insurance Agency. Here, too, Susie turns out to be a real whiz. At the end of the first month she gets a raise, and at the end of the second, another.

And then one day Mr. Jones runs into the president of the board of education at a Rotary Club luncheon. "Hey, Joe," he says, "I must have been wrong about your schools. I always thought you guys were a bunch of parasites living off American business, but when I see what that Susie is doing in our company--well, she's the best girl we've ever hired for that sort of work. Believe me, friend, if you're turning out people who can perform like that, you can count on old J.B. to help you out when you need it."

Joe is delighted and hunts up the superintendent. "Jack, did you hear what old J.B. Jones is saying about us?" he asks, and tells him the story.

"That's interesting. I have a letter here which I just received from that girl's folks." He reads:

"DEAR DR. SMITH: We want you to know that we think the wonderful adjustment our daughter has made comes directly from the things you and your school did for her. We wish there were some way we could help to make this possible for other children. If there is anything we can do to support your program, please do not fail to call on us."

Months go by. Susie gets more raises. She is successful and happy.

Then she meets "him." She is now 20 years old; it is 1975. She falls in love and decides she wants to get married.

But Mr. Jones says, "Now, Susie, don't do anything rash. You've got a good job here, with an excellent future. Don't throw it away."

Susie is not the kind to do anything too quickly. She waits a whole year. Then she gets married. After her marriage she continues to work. She enjoys working for the insurance agency and the company continues to value her as an employee. But after a little while there is a baby on the way, and Susie tells her employers she will soon have to stop work. Time passes, and eventually she quits work to become a full-time housewife and mother. She is 22 when Johnny is born in 1977.

Susie has two more children, the last born when she is 26. Two years later Johnny starts to school. Susie does not really miss him because the other children keep her busy. But another 4 years go by and (in 1987), when she is 32, the last child enters school.

Now Susie finds that she has more free time. She thinks about getting a job and talks to her husband about it, but he says, "No wife of mine has to work. Why don't you join a church group or a bridge club?"

She does join a bridge club, but decides playing bridge is not a worthwhile pastime and gives it up. She takes on a Scout den, but doesn't like it. She joins a church group and for a while does volunteer work at the Y, but she finds nothing she honestly likes to do. She becomes restless and unhappy.

More years pass, and suddenly a crisis looms which none of them had seen coming. Johnny enters high school. This was not unforseen, but with Johnny actually in high school things seem different. His future education looms nearer. Susie tells her husband, "Johnny ought to go to college. If he does, we're going to need about $2,000 or $3,000 a year more than we make now. And the other two are coming on. Don't you think I should get a job?" It is now 1989. Susie is 34 years old.

Susie goes back to the Jones Agency to try to get her job back. Old J.B. is dead, so she introduces herself to the new boss and says, "I used to work here about 13 years ago."

He says, "Well, that's wonderful. What can you do?"

"I can keep books."

"Keep books? Did they hire bookeepers in your day? We don't keep books in this office; that work's done on a machine. This is 1989!"

"Well, I can take shorthand."

"Did they hire stenographers in your day? I always thought that was done with dictating machines."

"I can type."

"We use the voice typewriter now."

"Well, I can manage an office."

"Look, Susie, do you see those six women in there? Each of them has 20 years seniority with this company. Quite literally, they are charity cases. The only reason those women are here is because they have seniority. Any one of them could manage this office with one hand."

"Then what can I do?"

"Can you program a computer?"

"What's that?"

"Can you use binary numbers?"

"What are they?"

"Susie, are you educated?"

"Of course I'm educated! I went through junior college!

"Well, you don't sound as if you are. Maybe you'd better look into that."

So Susie goes to the college and tells them she finds she needs more education. She wants to get her bachelor's degree now.

The admissions office looks up her records. "You know," he says, "We don't teach those commercial subjects any more. It's good that you took typing. We don't credit typing courses, but we require all students to type everything. Our professors don't

have time to try to figure out their handwriting. However, I'm not sure we could admit you to this college now."

"Do you mean I can't get back into college? I've already had 2 years. Here, I've got a certificate which says I graduated from this very school."

"Yes, but this college isn't the same as that college was. Students are required to prove their ability to study our courses. They take entrance exams in communication, both spoken and written, and in science and mathematics. There is also an examination on general background knowledge. You can arrange to take the exams next month."

Susie is shocked. It has been a long time since she has taken any examinations. But she wants to continue her education, so she signs up. When the grades come, though, her spirits fall. She passes the communication test by the barest margin. She fails to get high enough scores on the math-science and on the general background examinations. The admissions office tells her that she will have to study at night school to prepare for later tests.

"You mean I have to go back to high school? Why, that's foolish," and she storms out, saying to herself, "I don't see how I could get into a mess like this. I'm going back to see Mr. Collins."

Mr. Collins is living in retirement. But when he answers Susie's ring, he recognizes her immediately. "Susie, it's wonderful to see you. Come in. What brings you here?"

"Mr. Collins, I'm in deep trouble. I don't see how I can work it out." She tells him her problem. "How could anyone have such a wonderful start and end up in such a mess?"

The old man nods. "Susie, I want to show you something." He gets up and takes her across the room to show her a framed letter hanging on the wall. Susie reads it:

"OCTOBER 1, 1974.

"DEAR MR. COLLINS: I've just had my third raise. I want you to know that I think all my success comes directly from what you and your school did for me. I am so deep in your debt that I could never repay you.

"Gratefully,

"SUSIE."

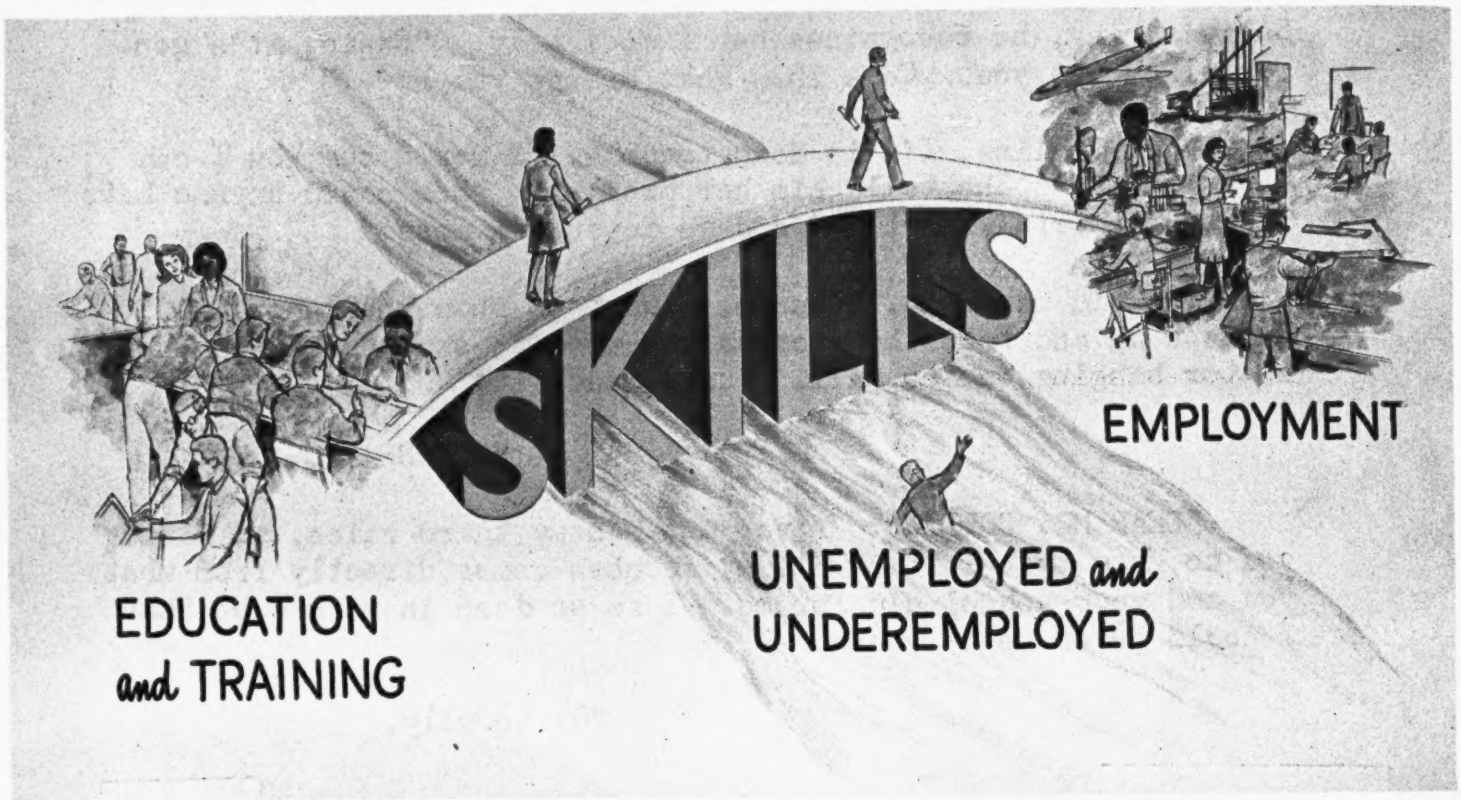
* * *

What did you learn from Susie's case? That middle-aged women will have difficulties in the future getting back into the labor force, (or even into school)? That present job skills may become obsolete? Susie's situation may have made you aware of the need for additional and continuing education to avoid becoming an "obsolete human resource." (After all, new machines and equipment are required by industry as technology advances. In the same way, the economy needs human resources with new skills and know-how.) To obtain the skills that you'll need to compete for tomorrow's jobs, continuing education will be essential. This continuous education and training will require your time and energy and in some cases, your money. (Remember -- there's no free lunch.) But the result of continuing investment in your own skills and abilities will be to increase greatly your chances for continuing success in the manpower market.

* * * * * * * * * *

## Today's Lesson in Brief

Many of today's specific occupational skills will not be good enough for tomorrow's jobs. Each man and woman entering the manpower market in the 1970's can expect to have three or four or even more different jobs during his productive lifetime. Only through continuing education and training can we prepare ourselves to meet the challenge of change in the world of work.

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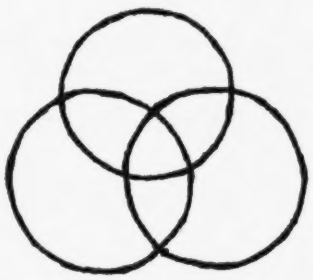
## The Economic World and Work: A Review Lesson

Economic understanding involves a knowledge of the structure of economics and familiarity with the way our economic system functions; skills in using statistics, history, and theory; and ability to apply the knowledge and skills in performing the five steps in economic reasoning. The preceding 23 lessons were designed to help each student develop a better understanding of economic reasoning, technology, and institutions, work, and our changing economic life.

* * * * * * * * * *

This is a review lesson. Its purpose is to help you go back over the first 23 lessons in the course and make sure that you understand the ideas, information, and facts that were presented. We know that you won't be able to remember everything that was included in the lessons, so we want to highlight some of the most important ideas and information. Of course, only you can say which ideas and facts are most important and meaningful for your own purposes. But we want to suggest a few "big ideas" for special emphasis. Lesson numbers are given in parenthesis (#) for quick reference.

* * *



1. We started the course by asking, What is economics all about? Can you give a short but meaningful answer? (#1, 2, 4, 13, 21, 22)

2. What are the three basic problems that every economic system must solve? (#3)
   --
   --
   --

3. Can you list the five essential institutions of pure capitalism? (#5, 6)
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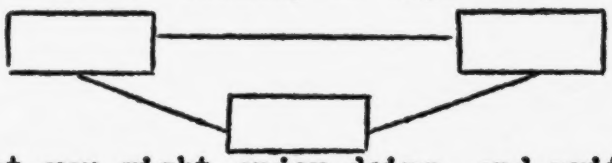
   Complete a Circular Flow diagram to show how a market economy is organized.



4. List five occupations or jobs that you might enjoy doing, and write down your estimate of how much you would be likely to earn weekly from each job. (#7, 8, 9, 10)
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5. Explain the meaning of each one of the following and what use it has in economic analysis:

   Gross National Product (#11)

   Opportunity Cost (#12)

   Economic Model (#14)

   Five Steps in Economic Reasoning (#15)

6. List the seven goals for our economy that were discussed in lesson #16 and be prepared to discuss what they mean.
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7. Discuss the functions of each of the following economic institutions, and tell something about their history and importance in the economy today:

   Business (#17)

   Government (#18)

   Labor Unions (#19)

   Consumer Households (#20)

8. Explain the meaning of technology, automation, and cybernation, and discuss some advantages, disadvantages, and future problems associated with them. (#21, 22, 23)

Write out one question that <u>you</u> would especially like to have discussed in class in order to increase your understanding of the topic:

* * * * * * * * * *

## Today's Lesson in Brief

After reviewing the first 23 lessons in the course and testing yourself to see how much you know, you will be ready to begin the next part of the course. We'll use economic reasoning, statistics, and history in making a detailed study of the manpower market, the economic value of education, and the psychological and social dimensions of work. And we'll explore other topics related to the broader economic and social world you live in.

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# Evolution of the Industrial System

Our present-day industrial economy has not always been the way it is today. It is the product of evolving technology, resources, and institutions. A process of continuing economic development and change is going on right now, and can be expected to transform our lives in the future just as the Industrial Revolution changed man's economic and social world in the 1800's and 1900's.

* * * * * * * * * *

In the first part of the course, we learned how the economic system of the United States is organized to solve three basic economic problems: How much to produce? What to produce? and, For whom to produce? We learned that our resources (manpower, capital, and natural resources) together with technology determine how much we can produce in total, and that institutions (social arrangements) determine how we actually use our resources and technology in producing goods and services and determining how the total income will be divided among the people who make up our economic society.

We have emphasized the importance of technology and technological change, and the role of institutions. And throughout the course we shall emphasize the supreme importance of human resources -- their development and their use.

Today, we want to make use of history to understand how our economy has changed during the past several hundred years, and why we can expect it to continue changing in the years ahead.

* * *

What was economic life like a thousand years ago, back in 967 A.D.? or 1300? or 1600 -- in Europe, where most of our ancestors came from? People worked, they produced goods and services, and they consumed. (They also paid taxes.) But how they worked, what they produced, and the food, clothing, housing, and other goods and services that they were able to consume -- these were all vastly different from today.

Economic life during "the Middle Ages" (500 A.D. to 1500 A.D.) and for roughly 250 years afterwards, was "pre-industrial". Most men worked as farmers; some were craftsmen; a very few were merchants. Production was for "subsistence" (just enough to live on). There were no huge corporations and bustling factories with power-driven machinery and armies of wage-earners. Transportation and communication were primitive: no railroads,

automobiles, airplanes, telephones, radios, TV. People lived (half as long as 20th century Americans) and died in small, isolated villages and towns, never knowing comfort, convenience, economic security, or what life was like 10 miles away.

Then, something began to happen. Over a period of years -- gradually and continuously over the centuries -- technology began to change. Transportation methods were improved, productivity in agriculture and industry was increased, trade and commerce were expanded. Like a snowball gaining force and speed as it rolls downhill, a process of revolutionary change transformed the old feudal system of Europe into the modern industrial world that characterizes Europe, the United States, and other areas scattered around the world.

What happened in the late 1700's and 1800's -- starting about 200 years ago -- has come to be called "The Industrial Revolution". It started in England and Western Europe, and later spread to America and other parts of the globe. Some people say it is still going on. Others say that we are now living in a second industrial revolution.

The term "Industrial Revolution" is used to describe a period of history when the pace of economic development was so rapid and the changes so dramatic and far-reaching that our social and economic life was "revolutionized". But more specifically, what are the historical facts about the Industrial Revoltuion? And why is the history of the Industrial Revolution significant for Americans living in the 1960's?

* * *

The Industrial Revolution was a process of technological and economic change that took place, first in England, and later in other countries of the world in the period after 1750. Machines were invented; water and steam power were harnessed to operate the machines; factories were built; large cities mushroomed; and men, women, and children were employed by a new class of "industrial capitalists" to produce goods for sale in markets throughout Europe and around the world. The key to the industrial revolution was the use of new machines and new methods to produce clothing, iron, pottery and hardware, machinery, and other goods. Rapidly improving technology was used to expand production; and the whole pattern of social and economic arrangements was disrupted and restructured in the process.

Examples of technological advances are the inventions of John Kay, James Hargreaves, and Richard Arkwright in the spinning and weaving of cloth. Abraham Darby and Peter Onions found better ways of making iron. Thomas Newcomen and James Watt developed the steam engine. In America, Eli Whitney invented the cotton gin in 1793 and began using interchangeable parts for mass-production of guns a few years later.

Before the introduction of these new machines and factories to house them, the production of clothing and other goods was done primarily in workers' homes or small shops under the "domestic system." With the growth

of factories, workers left their homes and workshops and began selling their labor in the industrial manpower market. Many books have been written describing conditions of the early factory workers in England and in the United States. (See lesson #19, "The Role of Labor Unions".) What the factory system did was to bring together large numbers of workers and large concentrations of capital equipment (machines operated by water power, then steam, and later electricity and the internal combustion engine), under the supervision and discipline of industrial managers. One result of this was vastly increased production. There were other results. For example, it created certain problems for workers, who now became completely dependent on industrial employment for providing a living.

Question: Can you think of some other problems caused by the Industrial Revolution, for workers and for other members of society?

* * *

Turning to the second question that we posed about the industrial revolution -- its significance for Americans living in the 1960's -- we can answer very briefly. The 18th century Industrial Revolution created today's world. The process of technological development and institutional change that started after 1750 created what we now call The Industrial System and thereby shaped the economic and social environment that we live in.

But the Industrial Revolution is also important because it showed us the process of technological progress and economic growth. This process is still going on today, at a faster rate than ever before. By looking back at the impact of industrial development in the past 200 years, we can now see into the future (not perfectly, in full detail, however). We can see how machines affect the work that men and women do, the goods and services they consume, and the kind of world they live in. Using th[illegible] knowledge of the past, we can make plans and adjustments to ease the b[illegible]s of future change and find ways to take fuller advantage of the oppo[illegible]ties and rewards of continuing economic growth -- not only as consumer[illegible]t also as workers and members of society.

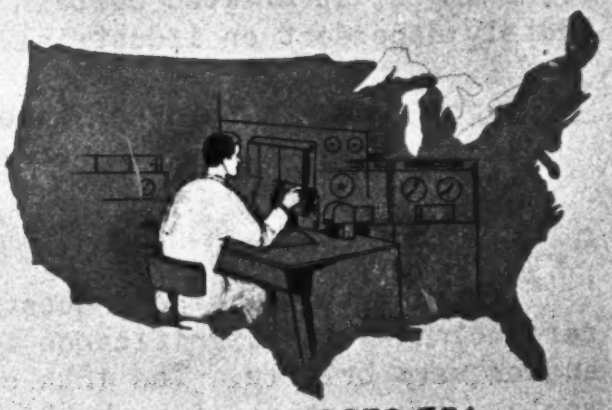
Question: "The U. S. economy has consistently given top pri[illegible]y to the production of more and more goods to satisfy the [illegible]petites of Consumers. Now, as we enter the era of the secon[illegible] Industrial Revolution, the time has come to strike a better balance between serving the needs of man as a Worker and his needs as a Consumer." Do you agree, or disagree? Why?

* * * * * * * * * *

Today's Lesson in Brief

The technology and institutions of our industrial economy evolved from the past. The process by which this evolution took place was revealed in the Industrial Revolution that began in England after 1750 and spread throughout Europe and America in the 1800's. We can expect that this process of technological progress and institutional change will continue in the future and will re-shape our lives just as the Industrial Revolution transformed the lives of our forefathers.

# THE CHANGING AMERICAN ECONOMY



HUMAN RESOURCES ERA
PRESENT

INDUSTRIAL ERA
1890's - 1960's

AGRICULTURAL ERA
TO 1890's

Changes in our technology, resources, and institutions have moved our economy from the Agricultural Era during the 17th, 18th, and 19th centuries through the period of Industrial development in the 1900's, and into the Human Resources Era that began in the 1960's.

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## The Nature and Functions of Work

Throughout history men have had many different ideas about the nature and importance of work. Work has appeared to some people as "a necessary evil", a way of "making a living", or as a means of "expressing oneself." Let's review what work has meant to man through the years, and the functions that work can serve. We'll need to know the meaning of the terms -- WORK, JOB, OCCUPATION, CAREER, and LABOR.

* * * * * * * * * *

What is meant by the term WORK? The dictionary defines it as an activity in which one exerts strength or effort to do or perform something (the effort may be physical and/or mental). Work is the labor, toil, duty, function, or assignment which is often a part of a larger activity -- like math homework, or household chores.

A JOB is a position in a particular plant or place of work. (Your uncle may have a job at a local General Electric plant.)

OCCUPATION refers to a group of similar work activities found in more than one place of employment. An occupation requires certain skills. (The building custodian in your school, and the carpenter helping to build a house in your community, are involved in an occupation.)

What is a CAREER? One definition is that this is a continuing pattern of productive activity demanding special preparation and undertaken as a life work. (The physician has a career in medicine, and your teacher has chosen a career in education.)

Can you think of some jobs, occupations, careers that you might like and some you would dislike? List three CAREERS you think you might like or dislike and be prepared to discuss them in class.

| Like | Dislike |
|---|---|
| 1-- | 1-- |
| 2-- | 2-- |
| 3-- | 3-- |

* * *

Work has two very basic ECONOMIC functions: to help produce goods and services, and also to provide the worker and his family with an income.

The first function of work -- to <u>produce</u> goods and services -- is so important and so obvious from the point of view of society as a whole, that we sometimes fail to recognize it. (So often we think of work from the individual point of view, as "a means of earning a living".) The value of work -- or of LABOR, to use the technical term -- was considered by economists to be so important that before the 1850's, they assumed that labor alone determined the value of goods and services. Economists still speak of "labor productivity" as if labor by itself were responsible for producing our total output even though we know that tools, equipment, and natural resources are also used in production. Labor is defined simply as <u>all human effort devoted to production</u>.

For most families in the United States, work is necessary to provide the <u>income</u> they need to maintain their standard of living. About two-thirds of the total income received by families comes in the form of wages and salaries paid for work.

* * *

Years ago, work was for most people strictly physical effort necessary for survival. (Even today, this is what work means to some Americans and to nearly all the people of Asia, Africa, and Latin America.) Later work became "what I do to earn a living for my family, to be able to pay rent or send the kids to college." Today, we know that work serves many purposes in addition to earning money.

What are some of the "non-economic" purposes of work? (Add a few more to this list):

1-- To have something to do and think about (a routine)

2-- To do something that will give me <u>status</u> in the community

3--

4--

5--

We'll talk more about these non-economic functions of work in future lessons.

* * *

Ideas about work have changed through the ages, and in fact, the very nature of work itself has changed. Some scholars say the notion of work as drudgery is tied up with certain religious ideas of "working by the sweat of one's brow" as punishment for "original sin", and so work has come to be termed a necessary evil. But work <u>can</u> be a pleasure as well as a means of earning a living. (Do you recall lesson #10, "The Joy of Work"?)

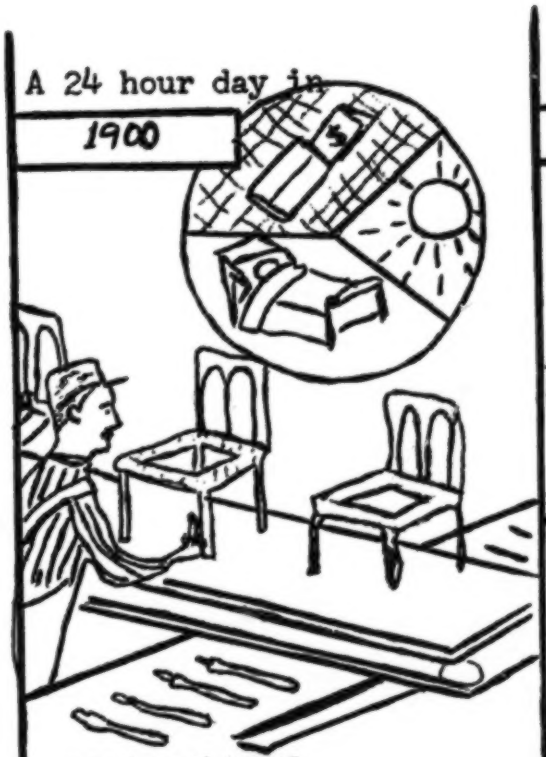
The nature of the type work we're now doing has changed through the ages. The following sketches show an example of how man, the skilled craftsman of the 1800's, made a complete chair, and then how methods changed.

With the beginning of factories and the assembly line, man started making just <u>parts</u> of a product. Present-day automation provides the modern worker with a set of buttons to push, or dials to operate instead of doing much manual work. We've seen the worker become more of a <u>specialist</u>; we've heard talk about the need for workers to have SKILLS. "No unskilled workers needed", is becoming the rule set by employers. With man freed from much strenuous manual labor and repetitious tasks through the use of machines, perhaps we'll see the worker of the future using his talents in quite different creative ways.

## THE CHANGING NATURE OF WORK

CRAFTSMANSHIP

Making things was long and hard--but gave opportunities for personal creativity




ASSEMBLY LINE

Making things became physically easier--but more routine and monotonous. Work was unskilled with little chance for creativity. Shorter work-day; more leisure

AUTOMATION

New skills and fewer workers are required. Increased leisure time can be used creatively or frittered away. More fringe benefits are available for the workers

(The pie charts in these sketches show how a worker divided his time among Work, Sleep, and Leisure in the years 1800 and 1900 and how he will probably divide his time in the 1970's. Note how the working day has been cut from 12 hours to about 8 hours.)

* * *

Question: Are workers better off today with automation and increased leisure than they were in 1800?

* * * * * * * * * *

## Today's Lesson in Brief

The nature of work has changed through the years. Today, work has three functions in American society:

-- to help produce goods and services.

-- to earn income so that the worker can maintain a high standard of living.

-- to fulfill some personal, non-economic needs of the individual worker.

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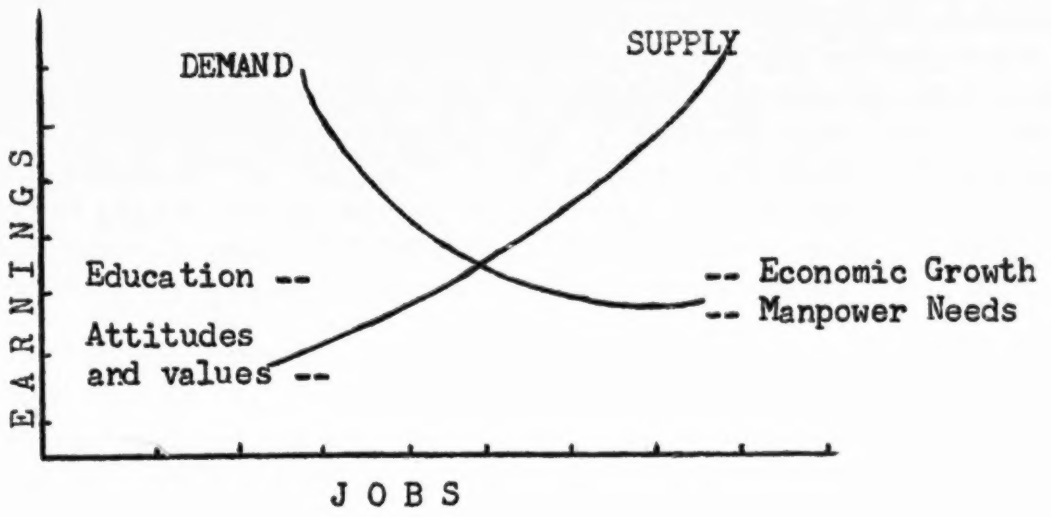
## The Manpower Market: Men and Jobs




The manpower market is the meeting of men and jobs -- the institutions, processes, and policies that make it possible for employers to obtain the human resources they need to produce our economy's goods and services. Men and women find opportunities for employment in the manpower market. By participating in the manpower market, workers have an opportunity to make a contribution to the economy's output, to earn an income, and to satisfy other human needs. Your chances of successful participation in the manpower market depend on interacting supply and demand factors.

* * * * * * * * * *

The manpower market brings together the suppliers of labor (workers) and the users of labor (employers, who comprise the demand side of the market). It is the means by which "the right people obtain the right jobs".

However, an exact matching of men and jobs does not take place automatically in the market. Information, communications, and movement are necessary to help put the right people in the right jobs. This lesson and others in the course contain information that should be valuable for you in achieving success in the manpower market.

* * *

The manpower market is the term we use to refer to the common features of the many different job markets. Actually, of course, there is no such thing as a single manpower market that brings all of the nation's workers and all the employers together in one large job market. Our diagram at the top of the page is merely another simplified model that is used to represent

the workings of manpower markets in order to help us understand what goes on in the economy. It is a composite of the factors at work in manpower markets. There are in fact thousands of job markets in the United States. The boundaries of some job markets are primarily geographical. That is, there are job markets in and around cities such as Columbus, Ohio. Job markets are also limited by occupational considerations. Unemployed coal miners, for example, are not in the doctor job market because they don't have the necessary skills to be licensed by the State of Ohio to practice medicine. (For a glimpse at the many different occupational job markets you can review lesson #8, "The Work That People Do".)

* * *

Just as we have markets for products where the forces of supply and demand influence price, so we also have markets for productive resources such as labor, natural resources, and capital. (You may want to review lesson #6, "The Circular Flow of Economic Activity" for information on the input and output markets). In these input markets, supply and demand factors determine the price of the input and therefore influence the amount of income that each resource will receive. (Review page one of lesson #9 "Wages, Earnings, and Family Income" for information on labor's income and an example of how supply and demand effect wages).

* * *

What should we know about the manpower market? First, the demand for labor is a derived demand in that it depends upon the demand for the goods or services in whose production it is utilized. Employers are willing to hire workers because the workers help produce goods and services that are in demand. Changes in consumer demand for products in the output market will have effects in the manpower market. The demands for labor differ among the various manpower markets because particular types of labor make different contributions to output. Some types of workers are more in demand because their skills are needed by employers or they are more efficient workers.

Second, the supply of labor differs among the various manpower markets because of the different characteristics of jobs and the degree to which these jobs are attractive to labor. The time and expense required on the part of labor to acquire the skills needed for certain jobs also affect the supply of labor.

Discussion questions about demand and supply in the manpower market:

1. How did the decrease in consumer demand for buggy whips in America in the twentieth century affect the workers in the buggy whip industry?

2. In general, do you suppose that today there is more demand for unskilled laborers than there was in the past? Why or why not?

3. What are some of the factors that determine the efficiency of a worker?

4. Is the supply of doctors greater than the demand for doctors? Why or why not?

* * *

Now let's look at four major factors that influence the supply and demand for labor in the manpower market. On the <u>supply</u> side -- which will be examined in more detail in later lessons -- one of the most important factors affecting the number and composition of the workers in the manpower market is the <u>attitudes and values</u> of workers themselves. Certain attitudes and values increase a worker's success in the manpower market by making him a better worker and/or more acceptable to employers.

What are some of the attitudes which you think might increase <u>your</u> chances of successful participation in the manpower market? (Hint: review the case of Susie in lesson #23).

1--

2--

3--

4--

* * *

The amount and type of <u>education</u> and training you and the other workers have will also affect the supply of labor in the manpower market.

How do you think your education will influence your participation in the manpower market? (For some hints, you might review lessons #8 and 23).

1--

2--

3--

* * *

The <u>demand</u> for labor in the manpower market is affected by the amount and composition of the growth in production that we have in the economy. Why? Because as our Gross National Product grows, this also increases the demand for labor. It takes additional resources to produce more goods and services. (Remember the relationship between inputs and output explained in lesson #12 and #13 and the derived nature of the demand for labor we talked about earlier in this lesson). The growth in the output of our economy is accounted for largely by the greater production of services. Thus, service-producing rather than goods-producing workers are more in demand.

* * *

<u>Question</u>: Does a change in the level of <u>income</u> of consumer households influence the total demand for labor in the manpower market?

* * *

The needs or requirements of employers also influence the demand for labor. All employers are not looking for the same type of workers. Moreover, the skill requirements of most employers change over time. In many cases, the skill requirements needed for employment increase. There is also a preference among employers for workers with certain attitudes and values.

* * *

Let's summarize what we have learned about the manpower market. The manpower market is made up of the institutions, processes, and policies which bring together the workers who are the suppliers of labor and the employers who are the users of labor. Employers use the manpower market to obtain the human resources they need for production; and through this market, men and women are provided employment opportunities. This input market has many different supply factors (education and attitudes and values) and demand factors (economic growth and needs of particular employers) which interact to allocate labor among competing employers. The demand for labor in the manpower market is derived from the demand for the goods and services it helps to produce. There are differences in supply and demand for workers participating in different specific job markets.

* * * * * * * * * *

## Today's Lesson in Brief

The manpower market provides for the meeting of workers and jobs. Supply and demand factors determine employment opportunities in the economy. Effective participation on the supply side of the manpower market depends upon the skills that workers have acquired through education and training and the attitudes and values that influence their response to changes reflected in the manpower market. The manpower requirements of employers on the demand side of the manpower market are influenced by the needs of their particular enterprise and the growth of the economy. Demand and supply forces interacting together will determine the chances that men and women have for employment and earnings in the manpower market.

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## "What's In It for Me?"

One of the rewards for successful participation in the manpower market is the pay that a worker receives. How much a worker earns depends on supply and demand forces in the manpower market and such factors as agreements between employers and labor unions and minimum wage laws. In general, workers who complete more years of schooling will get higher earnings.

* * * * * * * * *

We have seen that work has three functions: (1) to help produce goods and services; (2) to satisfy certain "non-economic" needs that workers have as human beings; and finally, (3) to earn the dollars people need in order to buy goods and services and maintain a standard of living.

In several lessons, we shall be focusing on the second and third of these functions to see what it is that a worker gets for working -- "what's in it for me" as a worker. These lessons will point out that men and women who are employed as "human resources" in the production system are able to get certain personal satisfactions and social recognition for the work they do. In addition, they get economic rewards -- money, and the goods and services that can be purchased with money.

* * *

How much money does a worker earn? In lesson #9, we reported that production workers in manufacturing were earning about $112 per week, on the average, in early 1967. They were paid wages of $2.80 an hour, and worked a 40-hour week. If they were able to work full-time for the entire year, annual earnings would amount to $5,824. (Actually, many manufacturing employees do not have the opportunity to work full-time for the entire year. Some weeks their hours of paid employment are reduced, and other times they are "laid off" the job entirely.)

The wage rate of $2.80 per hour is only an average, and it's only an average for workers employed in manufacturing industries. Many American workers earn $4 or $5 per hour or more and some earn as little as $1 per hour. In terms of yearly income, this means that some workers earn more than $8,000 per year, while others earn only $2,000 per year. (There are 2,000 working hours in a "typical" year, assuming a 40-hour week and 50 weeks of working during the year, with two weeks off for vacation or layoff. Therefore, assuming a worker is employed full-time during the whole year, you can figure his yearly income by multiplying his hourly wage rate by 2,000 hours.)

* * *

There are many factors that influence the pay that a worker receives for his labor. For now, we can say that wages basically are determined by the operation of supply and demand forces in the manpower market. Sometimes wages are set by collective bargaining agreements that employers and labor unions make. And in some cases, minimum wages are established by the federal government or state government. (A "minimum wage" of $1.40 per hour simply means that it is against the law for an employer to hire a worker and pay him less than $1.40 an hour. Of course he can always pay more, but if he paid less than $1.40 he would be breaking the law, and could be punished -- even if the worker were willing to accept less. The federal minimum wage was raised to $1.40 an hour in 1967, but many workers still are not covered by this law.)

* * *

"What's in it for me" depends, then, on several things:

-- supply and demand forces in the manpower market

-- institutional circumstances, such as the existence of labor unions or minimum wage rates established by government

-- who the "me" is, in terms of the worker's occupation, education, experience, and related factors

More will be said later about unions and collective bargaining, minimum wage laws, and a number of particular supply and demand factors. Today, let's select just one specific factor on the supply side of the manpower market -- education -- and examine some statistics that show a strong connection between the economic rewards of work and the "prior investment" that individual workers, with the help of society, have made in their own "human capital".

Table I shows the estimated lifetime earnings of American men, according to the number of years of schooling they complete.

Table I. ESTIMATED LIFETIME EARNINGS, FOR MALES, BY YEARS OF SCHOOL COMPLETED

| Year of School Completed | Lifetime Earnings* | Difference in Lifetime Earnings |
|---|---|---|
| Less than 8 years | $143,000 | -- |
| 8 years | 184,000 | + $41,000 |
| 1 to 3 years of high school | 212,000 | + 28,000 |
| 4 years of high school | 247,000** | + 35,000 |
| 1 to 3 years of college | 293,000 | + 46,000 |
| 4 years of college | 385,000 | + 92,000 |
| 5 or more years of college | 455,000 | + 70,000 |

*Earnings between age 18 and 64 (total of 46 years of work)

**For example a high school graduate earns $35,000 more in his working lifetime than a high school dropout.

Note: Estimates are based on actual earnings in 1959, with projections for the future, based on continuing growth of the economy.

SOURCE: Bureau of the Census, Income Distribution in the United States, by Herman P. Miller. Washington: U. S. Government Printing Office, 1966 (LC No. A66-7107) p. 270.

These statistics show that higher earnings are associated with more years of schooling. A man who has one to three years of high school can expect to earn only $212,000 in his lifetime, whereas a high school graduate can expect to earn $247,000. This doesn't mean that each and every dropout will earn less in his lifetime than each and every high school graduate. The figures refer to men with varying amounts of education, on the average. Another way to say this is that your chances of earning more money in your lifetime will be greater if you complete more years of schooling.

Question. Why do you suppose lifetime earnings of men and women with more education are higher than for workers with less schooling?

* * *

Now look at Table II, showing some additional detail on figures from Table I. We have made simple calculations to show how much will be earned, on the average, weekly, monthly, and yearly, by a man with only eight years of schooling, a high school graduate, and a college graduate.

Table II. AVERAGE WEEKLY, MONTHLY, AND YEARLY EARNINGS FOR MALES WITH DIFFERENT LEVELS OF SCHOOLING

| | 8 Years of Schooling | High School Graduate | College Graduate |
|---|---|---|---|
| Total lifetime earnings | $184,000 | $247,000 | $385,000 |
| Average yearly earnings | $4,000 | $5,370 | $8,370 |
| Average monthly earnings | $330 | $450 | $700 |
| Average weekly earnings | $75 | $105 | $160 |

SOURCE: Computed from data in Table I, rounded to nearest $10 or $5.

Question. Using data from Table I, figure the difference in average monthly earnings for a high school dropout and a high school graduate, and then make a list of some of the things the high school graduate could buy each month with the extra income he earned.

Average monthly earnings for dropout _____

Average monthly earnings for h. s. graduate _____

Difference _____

Goods and services that could be purchased each month with the extra earnings:

_____ _____

_____ _____

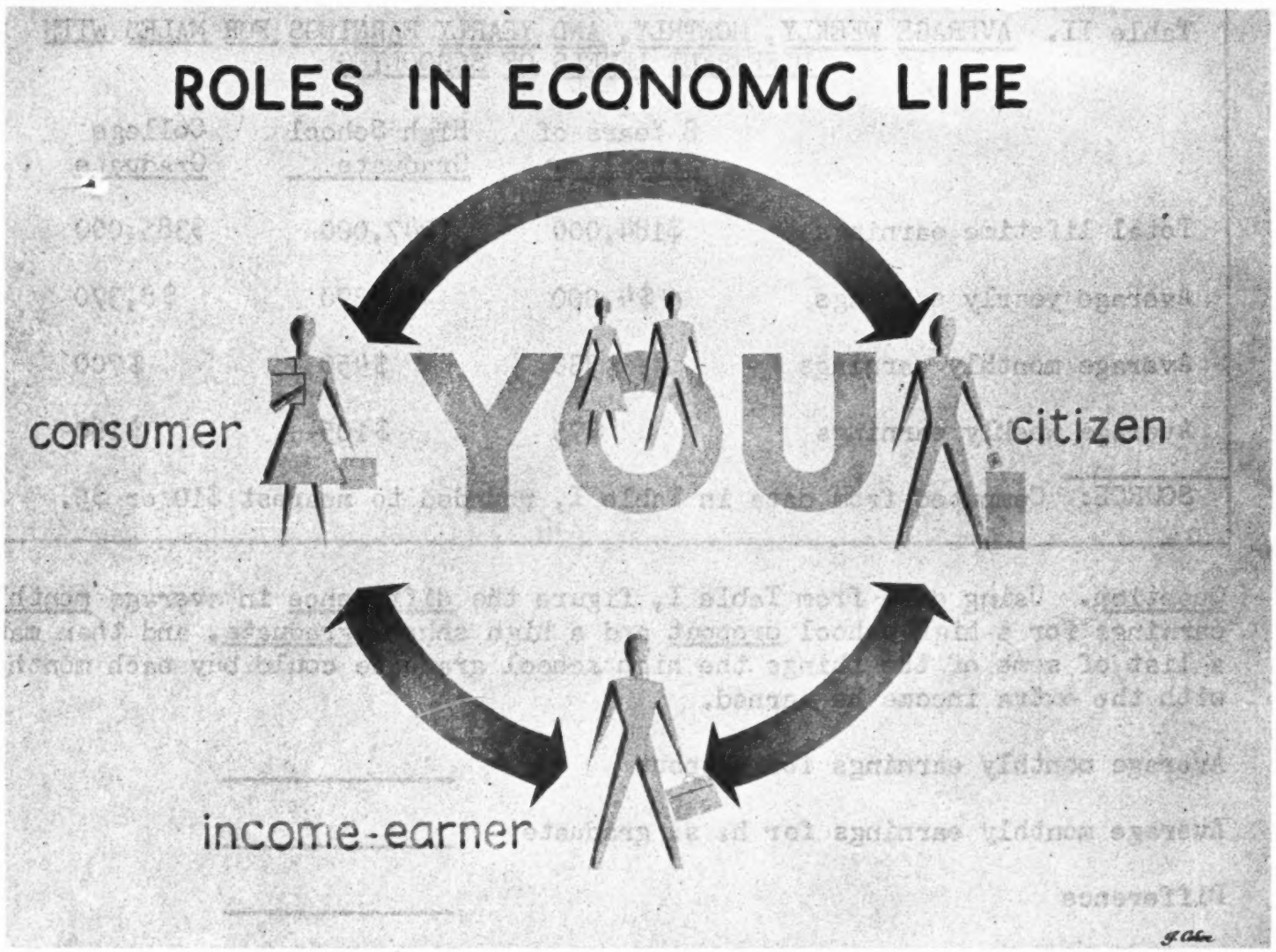
* * *

There is an excellent little book entitled Rich Man Poor Man, by Herman P. Miller, that contains much information on earnings and the distribution of income in America. It is available in paperback, published by the Thomas Y. Crowell Company as A Signet Book, 255 pages, 75¢.

* * * * * * * * * *

Today's Lesson in Brief

Workers who are successful in the manpower market get both economic and non-economic rewards. The economic or financial rewards depend on the supply and demand for workers with particular qualifications, and on institutional factors in the manpower market. Statistics show that male workers with more schooling on the average get better paying jobs and have higher earnings than workers with less schooling.




Earning an income is one of your three basic economic activities.

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## The Job: Satisfaction or Disappointment?

An important question to consider as you think about your future as an employed worker is whether you will find satisfaction in your job, or disappointment. Do the jobs we have really satisfy our needs? Or is there a "myth" of the happy American worker?

* * * * * * * * * *

Have you ever stopped to think about what feelings a worker has about his job -- like your dad, or the secretary in the principal's office, or the mail carrier? Here are a few examples, and you can add some others you think of:

1. Good fellowship
2. Accomplishment
3. Frustration
4. Nervous strain
5. Appreciation of beauty
6. Boredom
7.
8.

For most people and most jobs, we can find both positive and negative feelings.

The following 12 factors show what it is that different people may want or need to get from their job. The extent to which these needs are fulfilled will help determine how satisfied a worker is with his job. Which factors seem most important to you?

1-- ECONOMIC SECURITY. The need to feel assured of a continuing income and adequate level of living.

2-- RECOGNITION AND APPROVAL. The need to have your work and other things associated with yourself known and approved by others.

3-- MASTERY AND ACHIEVEMENT. The need to perform well according to your own standards and abilities. (This is very much like the famous "instinct of workmanship" stressed by the American economist, Thorstein Veblen, whose career extended from the 1890's to 1929. Veblen believed that people have a basic desire for activity that is directed toward the efficient achievement of a goal, and he wrote a book on the subject.)*

---

* Thorstein Veblen, The Instinct of Workmanship (And the State of the Industrial Arts). New York: MacMillan Co., 1914. Reprinted by W. W. Norton Co. as a paperback in 1964. There is a book about Veblen's life and his work that you might be interested in reading: Thorstein Veblen, by Douglas Dowd. New York: Washington Square Press, 1964. Paperback, 60 pages.

4-- DOMINANCE. The need to have some power or influence and control over others.

5-- SOCIO-ECONOMIC STATUS. The need to maintain yourself and family in accordance with certain community standards with respect to material ("money") matters.

6-- SELF-EXPRESSION. The need to have your behavior consistent with your self-concept -- what you believe "you are". (Thorstein Veblen's "instinct of workmanship" comes to mind again in thinking about satisfying this need.)

7-- AFFECTION AND INTERPERSONAL RELATIONSHIP. The need to have a feeling of acceptance by and belongingness with other people; the need to have some people like you and love you.

8-- MORAL VALUE SCHEME. The need to feel that your behavior is consistent with some moral code or structure, so you can feel virtuous -- that you are a good and worthy person.

9-- DEPENDENCE. The need to be directed by others to avoid feeling all alone and totally responsible for your own behavior.

10-- CREATIVITY AND CHALLENGE. The need for meeting new problems requiring initiation and imagination, and for producing new and original works.

11-- SOCIAL WELFARE (or ALTRUISM). The need to help others -- to have your efforts result in benefits to others.

12-- INDEPENDENCE. The need to direct your own behavior -- to "be your own man" -- rather than to be completely subject to the control of others.

* * *

We can quickly see how jobs give us economic rewards for our work through earnings. But consider also how some of the other needs are met through certain jobs. When co-workers seem to like you (and they might even elect you chairman of a committee, or as a union representative), when your family appreciates you, and when you have friends, you are gaining RECOGNITION and experiencing satisfying INTERPERSONAL RELATIONSHIPS.

When you have created an attractive dress or a delicious meal, made a beautifully-styled wood stool or bookcase you feel MASTERY and ACHIEVEMENT and SELF-EXPRESSION. (Veblen says we make such small parts of a total object today, on an assembly line, or in an office, that we often have no way of feeling the mastery and pleasure of creating a total item -- a "masterpiece".) The policeman may meet his DOMINANCE need through the influence he has over people in controlling the flow of traffic and preventing people from breaking the law.

The truck driver can feel both MASTERY and ACHIEVEMENT and DOMINANCE over machines as he is able to control his huge truck and trailer to back into narrow places to get his heavy loads to and from destinations. The medical doctor gets satisfaction from helping others (SOCIAL WELFARE). Teachers feel CREATIVITY AND CHALLENGE in trying to present your lessons so they are interesting and meaningful to you.

A writer, an advertising design man, and a sculptor are other examples of CREATIVITY and CHALLENGE, MASTERY, and ACHIEVEMENT and the writer and design man also achieve DOMINANCE if their work influences others. INDEPENDENCE is shown by the businessman who owns his own business, the executive, the personal secretary who may also be an office manager. Students are DEPENDENT on their teachers for motivation and direction.

* * *

Discussion Questions

Which of the needs seem most important to you? (Remember, you are unique and your answers will probably differ from others in the class.)

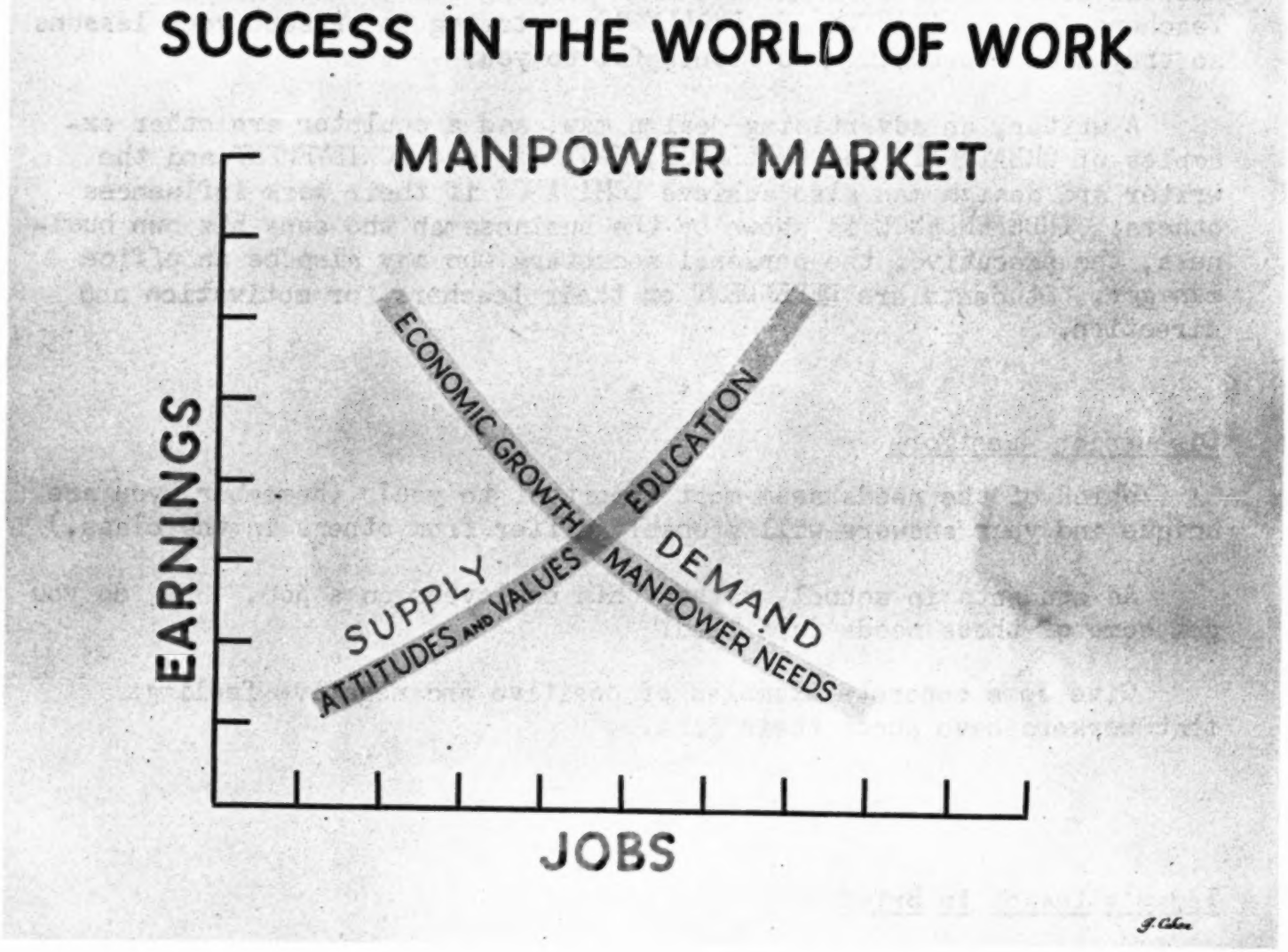
As students in school, rather than employees on a job, how do you get some of these needs fulfilled?

Give some concrete examples of positive and negative feelings that workers have about their jobs.

* * * * * * * * * *

Today's Lesson in Brief

Each person has needs, desires, feelings, and talents that he brings to the job. He wants to earn money, but he has other human needs as well. "Man does not live by bread alone." Whether his needs are fulfilled -- the amount of satisfaction he gets from the job -- depends on the worker and the opportunity his job gives him to express himself and achieve his goals.




The attitudes and values and the education you bring to the manpower market will help determine whether you will be <u>employed</u>, how much you will <u>earn</u>, and also the amount of <u>satisfaction</u> (or disappointment) you get from the job.

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## Measuring the Manpower Market

In order to understand the manpower market and be able to evaluate its performance, it is necessary to use concepts which correspond to facts that can be measured. The labor force is the concept which economists have developed to measure the manpower potential of the economy. Two additional concepts -- employment and unemployment are used to measure the status of the labor force and evaluate the performance of the manpower market. An understanding of the labor force, employment, and unemployment concepts will help you in evaluating the manpower market and your own employment opportunities.

* * * * * * * * *

You will recall that lesson #11 ("GNP and Some Fundamentals of Economic Statistics") discussed the need for statistics to evaluate the performance of the economy. Labor force statistics are valuable because they make it possible for us to measure changes in the status of our most important economic resource -- manpower.

The labor force is the dominant factor in our economy as our nation's economic accounts show. For example in 1966 American workers received 71% of the total National Income as compensation for the manpower they contributed to production. Consumer purchases -- paid for mainly out of current earnings from employment -- were 63% of Gross National Product. Thus, on both the expenditure and income sides of the nation's economic accounts, labor accounted for most of the activity. The labor force also provides the human resources needed to produce goods and services.

* * *

Information on the characteristics and use of the nation's human resources are gathered by state and federal government agencies and reported to the public in great detail. For example, separate figures are published for agriculture and nonagriculture workers by sex, color, marital status, age, and hours worked. An occupational and industrial description of the labor force and the personal characteristics of those not in the labor force are also published. These figures are the most important data that economists, governmental officials, businessmen, labor unionists, and other interested parties have available for checking on the manpower market. In order to understand and use labor force data, you have to know the definitions of the terms used by the governmental agencies and the methods they use in compiling these statistical series.

Let's begin our examination of labor force statistics by describing the concepts and methods used by the U. S. Department of Labor and cooperating State agencies in measuring the status of the labor force. The main federal government agencies that measure the labor force, employment, and unemployment are the Bureau of Census (in the U. S. Department of Commerce) and the Bureau of Labor Statistics (in the U. S. Department of Labor).

In monthly surveys that are made of a sample number of households and businesses throughout the U. S., each individual 16 years af age and over is classified as employed, unemployed, or not in the labor force, according to his activity during the week of the survey. The sum of the employed and unemployed comprise the civilian labor force. (An estimate of the total labor force is obtained by adding the number of persons in the Armed Forces, regardless of where they are stationed.) Men and women 16 years of age and over who are not classified as employed, unemployed, or in the Armed Forces are defined as "not in the labor force". These people are students, house wives, retired or disabled persons, institutionalized persons, those doing less than 15 hours of unpaid family work, and the voluntary idle.

To be counted as employed in the survey, the person must put in at least one hour a week on a job for pay as a wage or salary worker or for profit as an owner of a business. Also counted as employed are the socalled "unpaid family workers" (examples: sons, daughters, or wives working in a family business such as a store or farm) who work at least 15 hours a week without pay. Those persons who are not working or looking for work but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, labor-management dispute, or various personal reasons are also counted as employed.

Unemployed persons include those who are not employed for as much as one hour a week but who have been actively seeking employment and are currently available for work if employment can be found. The general test of "seeking employment" is that a person must have actively looked for a job (by going to the State Employment Service, applying to an employer, answering a job want-ad, etc.) within the last four weeks.

* * *

Question: In your own terms, define labor force, employment, and unemployment.

* * *

An easy rule to remember for telling whether people should be considered in or not in the labor force is to note their activity. Activity involving work classifies one as employed; activity involving looking for work classifies one as unemployed. Thus, activity divides the labor force from people not in the labor force.

Let's now see if we can use the labor force concepts we have learned. Please classify the following persons as employed, unemployed, or not in the labor force according to standards used by the government agencies mentioned

above. PUT THE CORRECT ANSWER IN THE BLANK PRECEEDING THE QUESTION. Use E for employed, U for unemployed, and NLF for not in the labor force.

___1. A factory worker who is on strike against his employer.

___2. A thirteen-year-old boy who delivers newspapers 15 hours a week.

___3. A woman working ten hours a week as an unpaid cashier in her husband's grocery store.

___4. A full-time housewife.

___5. A 16-year-old girl who is employed as a car-hop at a drive-in restaurant 12 hours a week.

___6. A high school student who applies for a job in April that he wants to begin in June after he graduates.

___7. A woman who was fired from her job two months ago and has been sitting around the house ever since, brooding over her bad luck.

___8. A truck driver who is visiting his state employment service looking for employment and who is ready to go to work as soon as he can find a job.

___9. An inmate of one of the state prisons who works in the metal shop stamping out license plates and is paid $.75 an hour.

NOW CHECK YOUR ANSWERS WITH THE REST OF THE CLASS.

* * *

We found that in order to know the dimensions of activity in the manpower market we have to measure how many people are working at jobs or who are seeking jobs. In other words, we have to have some manpower concepts which can be given numerical values. The concepts of labor force, employment, and unemployment are used by the U. S. Department of Labor and other federal and state governmental agencies (such as the Ohio Bureau of Employment Services, located in Columbus) to gather statistics on the boundaries and operation of the manpower market. These governmental agencies make estimates of the status of the labor force by surveying a sample of the nation's households and nonagriculture business establishments. Detailed reports are published and then they are used by employers and other people interested in the manpower market.

* * * * * * * * * *

Today's Lesson in Brief

The dimensions and the performance of the manpower market can be measured and evaluated by using the concepts of the labor force, employment, and unemployment. These concepts are used by federal and state governments for gathering and publishing statistics on the functioning of the manpower market. Labor force and employment data are essential for those who want to understand how our nation's human resources are being used.

This page provides a summary of the Occupational and the Industrial classification systems (based on U. S. Department of Labor procedures) that we will be using in lessons that follow. You will want to refer to this summary sheet in the future.

## SUMMARY OF OCCUPATIONAL AND INDUSTRIAL CLASSIFICATION SYSTEMS

### Occupational Classification

WHITE-COLLAR

- Professional and technical workers
- Managers, officials, and owners (nonfarm); sometimes termed Managerial
- Clerical workers
- Sales workers

BLUE-COLLAR; also termed Manual

- Craftsmen and foremen (includes mechanics & repairmen); also termed Skilled
- Operatives (includes assemblers, drivers, and inspectors); also termed Semiskilled
- Laborers (nonfarm and nonmining); also termed Unskilled

SERVICE

- Service workers (includes private household workers)

FARM

- Farmers and farm managers (includes farm laborers and foremen)

* * *

### Industrial Classification

GOODS-PRODUCING; sometimes excludes agriculture; sometimes termed Production industries

- Manufacturing (includes durable and nondurable goods)
- Contract Construction; also termed Construction
- Agriculture
- Mining (includes forestry and fishing)

SERVICE-PRODUCING; sometimes termed Services industries

- Government (includes local, state, and federal governments and public schools); also termed Public Administration
- Transportation and Public Utilities (includes communication)
- Trade (includes wholesale and retail)
- Finance, Insurance, and Real Estate
- Service and Miscellaneous (includes non-public education, medical, and repairs)

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## The Changing Manpower Market

The labor force is the supply of workers who already have jobs or are able and willing to accept employment. It is from this group that employers choose their workers. The labor force keeps changing, in number and composition. Knowledge of the changing labor force can prove valuable to you in planning your career. It will help you identify the amount and type of competition you will face in tomorrow's manpower market.

* * * * * * * * * *

In this lesson, we consider the questions of who is included in the labor force and what is happening to its size and composition. And we'll discuss the significance of changes that are taking place in our labor force.

* * *

The OVERALL SIZE of our labor force has been growing steadily. In 1870 we had about 13 million workers in the total labor force. By 1970 it is projected by the U. S. Department of Labor's Bureau of Labor Statistics that the labor force will be 86 million. That amounts to a six-fold increase (up 560%) in the past 100 years.

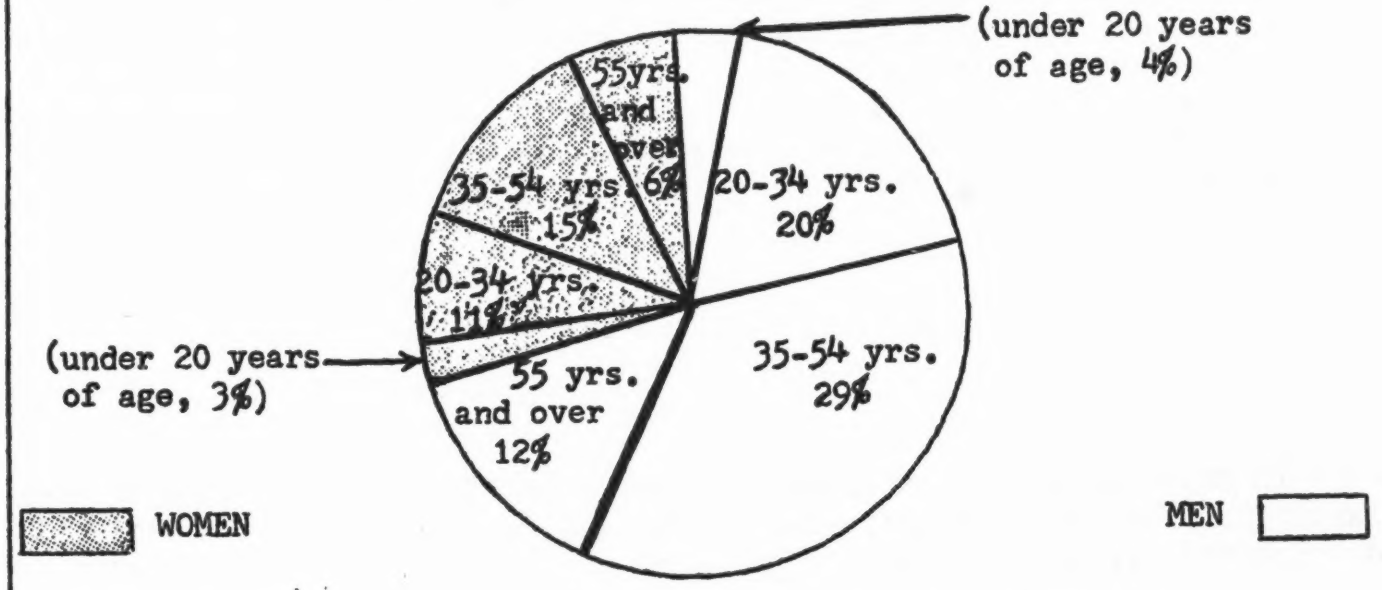
What changes have occurred most recently? Looking back to 1940, we find that we had a labor force of 56 million. By 1960, it had grown to 73 million -- an increase of 17 million potential jobholders. However, this past growth in the labor force is overshadowed by what will happen during the period 1960-1980. By 1980, it is projected that our labor force will be 101 million or 28 million more than it was in 1960.

In other words, it is projected that our labor force will grow almost twice as fast during the 1960's and 1970's as it did during the 1940's and 1950's. During the decade 1960-1970, our labor force will grow from 73 to 86 million -- a 22% increase. We are presently in the period of the most rapid labor force expansion. Between 1965 and 1970 our labor force will increase by 7.5 million which is almost 50% greater than the increase that occurred during the first half of the 1960's. In the 1970's, our labor force growth will slow down a little -- increasing only 18% in comparison with the 22% growth in the 1960's.

* * *

Now let's look at the COMPOSITION of our labor force. Chart I shows the structure of the civilian labor force in March 1965. (Note: Civilian Labor Force = Total Labor Force minus Armed Forces.)

Chart I. CIVILIAN LABOR FORCE BY AGE AND SEX, MARCH 1965




SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, April 1965.

The chart shows, for example, that in a recent year 35% of all the workers in the civilian labor force were women, while 65% were men. Of all the women in the labor force, the largest group was in the 35-54 age bracket.

Questions. Using the data in Chart I, please check the correct answer.

I-a. More than three-quarters of all workers in the labor force are men. True_____ False_____.

I-b. The majority of workers, men and women combined, are under 35 years of age. True_____ False_____.

* * *

The Sex and Age composition of our labor force is changing. Women increasingly are playing a more important role in our labor force. At present, more than one-third of all workers in the labor force are women. They are entering the labor force in the 1960's at double the rate of men. (By the 1970's, the difference in growth rates between men and women will narrow.) An increasing number of middle-aged women are entering the labor force. However, the labor force over-all is becoming increasingly younger. Projections show that between 1960 and 1970 there will be a 65% increase in the number of young workers (under 25 years of age) in our labor force. This is more than three times the increase of young workers that is projected to occur between 1970 and 1980. During the 1970's, growth rates of the different age groups (under 25 years, 25-54 years, 55 and over) in the labor force will be more nearly equal than they were in the 1960's.

Another way to examine age and sex trends in the manpower market is to note labor force participation rates. A labor force participation rate is the percentage of workers who are in the labor force out of the total number of people in a certain group of the population. For example, of all males 25-54 years of age about 98% are presently in the labor force. (This is the same rate that is projected for 1980.) For women (all ages combined), the participation rate will rise from 36% in 1960 to over 40% by 1980. Nearly half of all women 25-54 years of age will be in the labor force by 1980. Of the 101 million workers expected to be in the total labor force in 1980, about 36 million will be women.

Questions:

1. What is the significance to you of the growing participation of young workers and women in the labor force?

2. What problems might be created for the society and the economy because of the increasing number of youth and women entering the labor force?

3. Why do you suppose so many women are entering the labor force?

* * *

Let's summarize what we have learned about our changing labor force and consider the significance of these changes. We found that we have a rapidly growing labor force. From 73 million in 1960, our labor force is expected to expand to 101 million, by 1980. The latter half of the 1960's is the time of most rapid growth. Women and also young men are entering the labor force in increasing numbers during the 1960's. During the 1970's the relative growth in numbers of young workers (under 25 years) will only be about one-third of what it was in the 1960's. The growth rate of women joining the labor force will also slow down during the 1970's. However, the participation rate of women is creeping upward and is projected to be greater than 40% in 1980.

* * *

The significance of this growth in our labor force is that our economy will have to create an average of about 1½ million additional jobs every year between now and 1980 in order to employ all the new labor force entrants. These additional jobs do not include the better than 2 million a year that the economy will need to generate to offset the productivity gains of American industry. In other words, our economy will have a real growth rate (GNP) of 4% to 5% every year between now and 1980 if we are to find jobs for all the members of our labor force.

Projected growth in our labor force, when viewing its age and sex composition, suggests that women will be increasingly competing with men for jobs. Middle-aged women who are reentering the labor force after raising their families will be especially tough competition for younger girls and for men seeking employment opportunities. The growing youthfulness of the labor force means that competition among young people for jobs will be keen. Our economy must generate an average of about 750,000 entry-type jobs every year during the 1960's to take care of all the young people who are entering the labor force. (During the 1970's, the number of entry jobs needed will drop to about 300,000.)

Employers during the latter part of the 1960's and the 1970's,will have a large number of young workers to choose from and will undoubtedly prefer to employ those who have the best education and training. By the time you enter the labor force in the 1970's not only will you face stiff employment competition from your fellow young workers, but those workers who will be a few years older will also be present in large numbers as competitors for the better jobs that are available.

* * * * * * * * *

## Today's Lesson in Brief

Our labor force is growing rapidly, in part because of the increasing number of young workers and women who are entering the labor force. Between now and 1980, our economy will have to generate a real growth rate higher than we have had in the immediate past if we are to find jobs for present and new members of the labor force. Competition for jobs will probably be keen during the 1970's, and employers will tend to hire those who have the best education and training.

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## Collective Bargaining

Collective bargaining is the basic means used by labor unions and employers to arrange the terms and conditions of employment for workers in "organized" manpower markets. Collective bargaining typically involves the negotiation of a contract listing such details as rates of pay for workers and including a grievance procedure for carrying out and enforcing the contract. Knowing how labor and management work together in a system of "industrial law and justice" will help you develop a better understanding of the modern manpower market.

* * * * * * * * * *

Collective bargaining is a process of determining the terms and conditions of work by means of formal agreements between employers and labor unions. (You may want to refer back to lesson #19, "The Role of Labor Unions", to review the basic purposes of unions.) The results of discussions, negotiations, and "bargaining" are written out in a collective bargaining agreement, or contract, that is legally binding on the employer and on the union and its members. This contract spells out in detail the terms and conditions under which employees are to work.

While the provisions of collective bargaining contracts vary widely among different industries, and even among different firms, there are certain elements found in nearly all collective bargaining agreements. These include wage rates and other forms of compensation, security provisions for workers and unions, hours of work, and work loads or production standards. Collective bargaining agreements also typically contain a clause that maintains that there will be no strike or lockout during the term of the contract. The agreement may specify that certain decisions are exclusively the right of management, such as deciding on plant locations and supervising the work force. Other work rules, such as those relating to discipline and layoff, may be subject to determination by both the labor union and management.

The contract also includes a procedure for dealing with grievances. A grievance is a complaint, usually by an individual worker or management representative (but sometimes by the union or company), concerning interpretation of the terms of the collective bargaining contract. Differences of opinion sometimes arise over what the collective bargaining agreement actually provides. The grievance procedure is a method of resolving these differences by determining whether the disputed action of the employer, his representative, worker, or union official was in accordance with the contract. It is especially helpful to the worker as a means of assuring individual treatment and justice in the work place.

The grievance procedure may involve as many as three separate steps, though most grievances are settled at the first stage. (1) First, a meeting of the grievance committee is held to see if they can work out an agreement between themselves. This committee often includes the shop foreman (and/or department head representing management) and the shop steward -- a worker in the firm who also is a union official -- and/or a local union representative. (2) If these men can't settle the disagreement among themselves, they turn the dispute over to management and labor representatives who have positions higher up in their respective organizations, e.g., plant manager, and president of the union local. These men sometimes make use of a mediator in their attempt to find a solution to their disagreement. The mediator, who is a third party agreeable to both union and management, may be called on to suggest ways of settling the grievance. The mediator's recommendations are usually in form of a compromise solution to which both parties can agree. (3) If steps 1 and 2 have failed to settle a grievance, the third and final step involves submitting the grievance to final and binding arbitration. In arbitration, a third party -- the arbitrator -- is picked to settle the dispute. The arbitrator is a person agreed on by both parties who hears both labor and management present their arguments about the grievance and then makes a final decision that resolves the grievance.

* * *

The institution of collective bargaining is said to perform at least three broad functions which would have to be performed one way or another in any society. 1-- It is a system of industrial "law" for setting the detailed rules of the work place and for administering these rules. 2-- It is a procedure for setting wage rates and the details of compensation. Compensation consists not only of wages, but of a variety of benefits, such as vacations-with-pay, holidays-with-pay, health and welfare plans, and pensions. The income received by its members is a central concern to a union because its members look to it to gain them higher wages or salaries. The compensation of employees is important to management because it may affect their competitive position in the output market. (A modern factory, for example, employs hundreds of different kinds of workers. Wage-rates for these jobs are significant to employees for reason of income and fair treatment, and to management for reasons of costs.) 3-- Collective bargaining is a system for settling disputes centering around the content of an agreement, and how the contract is interpreted and carried out.

Collective bargaining does not eliminate labor-management conflict, but it does establish rules and procedures for settling disputes. It encourages a more responsible approach to settling disagreements. Sometimes the "jawbone"phase of collective bargaining breaks down and work stoppages results. The union may call a strike, so that workers temporarily walk off their jobs as a group. The company may order a lockout, shutting down the plant and not allowing workers to perform their jobs. More will be said about work stoppages and their impact on the economy later in the lesson.

* * *

Questions:

1) What is collective bargaining?

2) Indicate one of the basic functions of collective bargaining.

3) Describe, in your words, what takes place in the three steps of the grievance procedure.

4) Arbitration is a means for negotiating new collective bargaining agreements. (Please check the correct answer.) True____ False____.

5) The provisions of collective bargaining agreements are basically the same in all industries. True____ False____.

* * *

How well does collective bargaining work in the United States? Let's try to answer this question by looking at a list of advantages and disadvantages that are claimed for collective bargaining:

Benefits of Collective Bargaining:

1. Reduces the power of the employer to play one worker against another in order to cut wage to lower the company's labor costs.

2. Leads to higher wages that provide additional purchasing power for consumers. This helps keep market demand high and prevents recession.

3. Increases the voice and power of workers through their union, assuring them of justice and fair treatment on the job.

Criticism of Collective Bargaining:

1. Gives too much power to unions and management which they may use to promote their own selfish interests at the expense of consumers and the public. This concentration of power will eliminate the competition that assures the maximum efficiency and output of the economy.

2. Causes inflation by increasing wages faster than productivity.

3. Results in inefficient work rules, e.g., "featherbedding" (requiring more workers for a job than really are necessary).

4. Leads to numerous and costly work stoppages (strikes and lockouts).

* * *

The criticism that collective bargaining leads to many costly work stoppages can be evaluated by looking at the data to see how often collective bargaining has broken down and resulted in strikes or lockouts. Table I, which is concerned with work stoppages lasting more than one day,

shows that in 1965 the 3,963 work stoppages that took place resulted in a loss of less than one percent -- .18 -- of the total number of days worked by all employed workers. Work stoppages involved 1.55 million workers -- 3.1% of all employed workers -- and averaged 25 days in duration in 1965.

Table I. WORK STOPPAGES IN THE UNITED STATES, SELECTED YEARS 1940 to 1965

| Year | Work Stoppages Beginning in Year | | Workers Involved | | Man-days Idle During Year | |
|---|---|---|---|---|---|---|
| | Number | Average Duration (calendar days) | Number (thousand) | Percent of Total Employed | Number (thousand) | Percent of Estimated Working Time |
| 1940 | 2,508 | 21 | 577 | 2% | 6,700 | 0.10% |
| 1945 | 4,750 | 10 | 3,470 | 12 | 38,000 | 0.47 |
| 1950 | 4,843 | 19 | 2,410 | 7 | 38,800 | 0.44 |
| 1955 | 4,320 | 18 | 2,650 | 6 | 28,200 | 0.26 |
| 1960 | 3,333 | 23 | 1,320 | 3 | 19,100 | 0.17 |
| 1961 | 3,367 | 24 | 1,450 | 3 | 16,300 | 0.14 |
| 1962 | 3,614 | 25 | 1,230 | 3 | 18,600 | 0.16 |
| 1963 | 3,362 | 23 | 941 | 2 | 16,100 | 0.13 |
| 1964 | 3,655 | 23 | 1,640 | 3 | 22,900 | 0.18 |
| 1965 | 3,963 | 25 | 1,550 | 3 | 23,300 | 0.18* |

* For example, shows that less than one-fifth of 1% working time was lost because of work stoppages.

SOURCE: U. S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1966, p. 247.

I-1. Has the number of work stoppages increased greatly in the 1960's?

I-2. Has the average length of work stoppages increased greatly during the 1960's?

I-3. About what percent of working time on the average has been lost on account of work stoppages every year during the 1960's?

I-4. The percent of the total number of man days lost due to strikes has actually decreased during the 1960's over what it was in 1955. Please check the correct answer. True____ False____.

I-5. Does the data on work stoppages suggest to you that collective bargaining has failed or is working poorly?

* * *

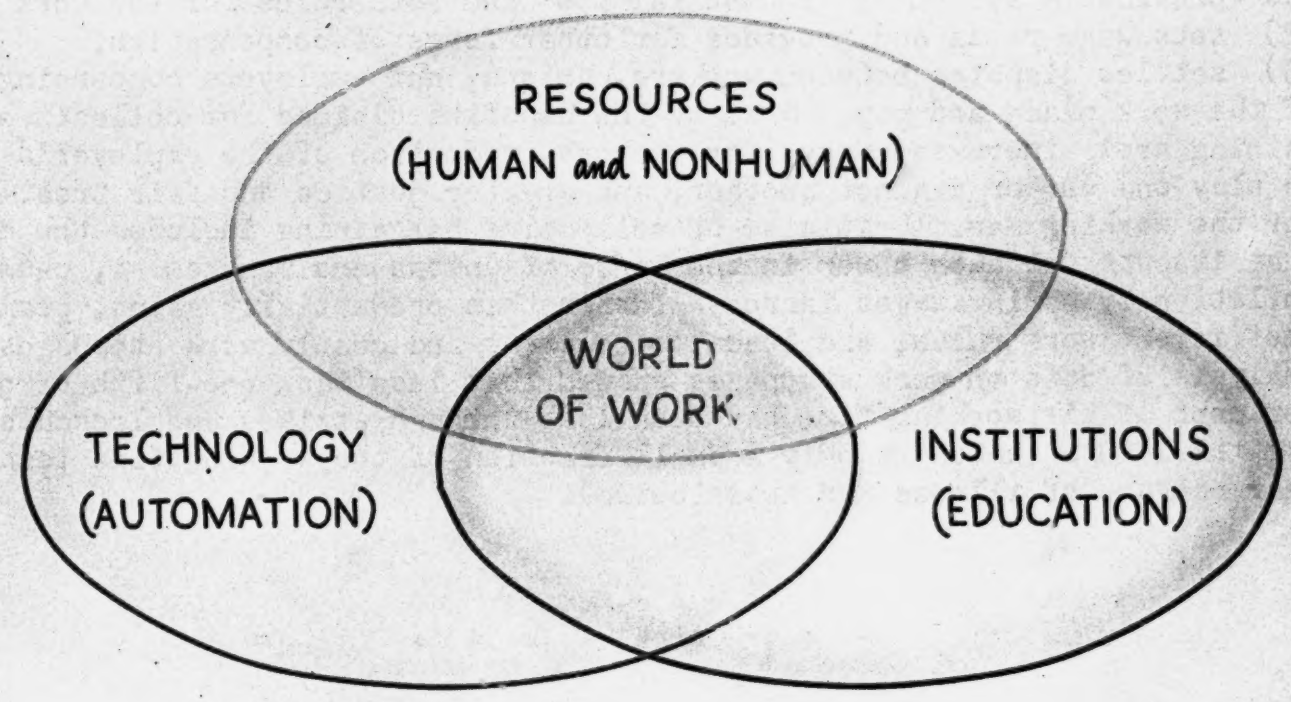
Let's summarize what we have learned about collective bargaining. We defined collective bargaining as a process of negotiating between labor unions and employers to establish the terms and conditions of employment for workers. The results of collective bargaining are contained in an agreement or contract. One important part of the collective bargaining contract is the provisions for settling grievances which arise. A grievance procedure may involve three different methods of settlement between the union and the employer. Collective bargaining performs three broad social functions:
(1) provides a system of "industrial law" and sets rules for the work place;
(2) sets wage rates and provides for other forms of compensation;
(3) settles disputes between workers, unions, and employers concerning rules of the work place and pay. Some of the benefits claimed for collective bargaining are: increased wages for workers, reduction of the employer's power to play one worker against another, and greater justice and fair treatment for the working man. Criticism of collective bargaining includes the claim that it puts too much power in the hands of unions and management, causes inflation by having wages increase faster than productivity gains, permits inefficient work rules, and leads to numerous and costly work stoppages. Analysis of data on work stoppages showed that less than one-fifth of one per cent of all working time has been lost through strikes and lockouts during the 1960's (which is only a small fraction of the working time lost each year because of illness and absenteeism).

* * * * * * * * * *

## Today's Lesson in Brief

Collective bargaining is the major means used by labor unions and employers to set the terms and conditions of employment for workers. It gives workers a system of "industrial law and justice." However, it is sometimes criticized on grounds that it interferes with the free operation of the manpower market. Data on work stoppages show that collective bargaining works smoothly in most cases, and that strikes and lockouts typically affect only a small fraction of workers and total working time.

# THE CHANGING WORLD OF WORK




Human resources play the key role in our changing economy. For that reason, they must respond to new technology and its changing manpower requirements. Collective bargaining is a method of adjusting to the challenge of technology and creating a world of work that is not only efficient and productive, but also meets the various social and economic needs of workers.

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## The Long Arm of the Job

A job is more than a means of earning a living. The "long arm of the job" reaches out to influence a worker's TOTAL life. What work you do, why you do it, where, how, and with whom you perform your job will greatly influence your whole life style. The job helps to shape personal behavior patterns and establish beliefs in certain ideas, values, and attitudes.

* * * * * * * * * *

What is meant by the following statement? "What a man is, both in his own mind and in the eyes of others, is closely involved with the work he does."

It means, plain and simple, that the kind of work you do, and how well you do it will contribute a great deal to forming your personal identity.

Decisions you'll be making in the next few years about your choice of a career will have a tremendous effect on your total future life. You'll need to decide whether you'll graduate from high school, "where from there?" -- technical school, job, college, nurses' training, business school, armed forces, marriage.

* * *

Consider just a few of the ways a person's choice of a vocation might affect his future: (Try to answer the questions that are asked.)

1-- The choice of an occupation may determine whether he is employed or unemployed. (How would employment or unemployment in turn affect his needs and how they are met?)

2-- It may determine whether the person enjoys or hates his work. (How will this affect his performance on the job?)

3-- The choice may determine "success" or "failure" in life. (How? In what sense?)

4-- It may affect his whole style of living.

* * *

Let's pursue this fourth point. Think about the ways that your vocational decisions might shape the way you live, by influencing:

-- the atmosphere in which you will work
-- the men and women with whom you work
-- the kind of clothes you wear
-- the car you drive

-- the house you live in
-- where you'll live (the state, the town, the neighborhood)
-- the people who will be your friends
-- the clubs and organizations you belong to

-- your hobbies and recreational activities
-- your ideas on political affairs
-- your choice of books and magazines to read
-- the kind of education your children will have

-- the way you express yourself, accomplish things, and contribute to the world you live in.

How can your job, your occupation, your career have an influence on each of the above parts of your life? In the space below, jot down a few specific examples that you can think of:

***

***

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* * * * * * * * * *

## Today's Lesson in Brief

A job creates a style of life for a worker. Its influence extends beyond his place of employment and length of the work day. The "long arm of the job" reaches into his home and family, affecting his total way of life -- his ideas and ideals, attitudes and interests, manners, clothes, and even the way he speaks.

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## Finding the Trees in the Employment Forest

The operation of the American manpower market involves the activities of over 70 million workers, employed in thousands of occupations. To start planning and preparing for employment, you'll need to find a way of examining the many different types of jobs that exist in the economy.

- In what types of occupations are workers in our economy employed?
- How are jobs classified according to particular occupational groups?
- How many workers are employed in each of the occupational groups?
- How are workers classified according to industrial groups?
- How many workers of various types are employed in each industrial group?

The next few lessons will help you answer these questions, starting with information on how occupations and industries are classified and data on the number of workers employed in the various occupational and industrial groups.

* * * * * * * * * *

Let's begin our examination of the multitude of jobs in our economy by looking at one way of summarizing these jobs -- putting them into meaningful groupings. We will also try to get an idea of the number of people in the various occupational groups.

One way of classifying jobs and workers is to take all the different jobs in the economy and label them white-collar, blue-collar, service, or farm occupations. An occupational group contains a number of different jobs which have similar broad characteristics such as entrance requirements, potential earnings, or "a way of life and labor."

WHITE-COLLAR workers, for example, are distinguished not only because they wear "white-collar" clothes, but also because they work in occupations that are centered in offices, laboratories, classrooms, stores, and salesrooms. In general, these workers do not normally depend on their manual or physically manipulative skills to perform their work. Rather, their work involves a relatively high degree of mental and communication skill and is characterized by dealing directly with people, their property, or their records. They teach us, keep us healthy, manage our enterprises, handle our legal problems, design our bridges, create our knowledge, and look after our accounts.

In 1965, out of a total employed work force of 72 million, over 32 million men and women (44% of total employment) were employed in the white-collar occupations. More than half of all women employed in 1965 were working in white-collar occupations. For men the comparable figure was 38%.

What is the breakdown (sub-grouping) of these white-collar jobs? Professional and Technical Workers accounted for 9 million of the white-collar jobs in 1965; there were 11 million Clerical Workers; there were 7 million Managerial Workers (managers, officials, and owners); and nearly 5 million Sales Workers.

* * *

BLUE-COLLAR or manual workers include three different occupational groups:

1-- skilled workers (craftsmen, mechanics, repairman, and foremen).

2-- semiskilled workers or "operatives" (machine operators, assemblers, drivers, and inspectors).

3-- unskilled workers (laborers).

Blue-collar workers are distinguished by wearing "blue-collar" clothes to work. They use physical or manipulative skills, working primarily with their hands; and they work more with things than with people. Manual workers help transform the ideas of our scientists,engineers, managers, and administrators into goods and services. They operate equipment, build, control, repair, move, wrap, pack and unload. They provide most of our manpower "muscle". In 1965, 37% of all employed workers were working in blue-collar occupations. The 26 million blue-collar workers in 1965 were employed as follows:

* Semiskilled Workers .... 13 million

* Skilled Workers ..... 9 million

* Unskilled Workers ..... 4 million

TOTAL BLUE-COLLAR WORKERS .... 26 million

* * *

SERVICE occupations, which employed 9 million workers in 1965 -- 13% of total employment -- include jobs that provide protective, personal, building maintenance, and private household services to individuals, organizations, and the community. Service workers feed us in restaurants, cut our hair, babysit, put out our fires, and clean our buildings. Almost one-quarter of all women workers in 1965 were employed in this occupational group. On the other hand, only 7% of the total number of men employed in 1965 were working in service jobs.

FARM WORKERS include farmers, and farm managers, laborers, and foremen. These workers are employed in producing food and fiber on the farms in our economy. In 1965, 4.3 million farm workers were employed, mostly men. (This was a million less than in 1960 and only half the number of farm workers employed in 1940.)

* * *

One quick way to grasp the relative importance of employment in each of these occupational groups is to note their respective share of the total number of workers employed. This was the breakdown in 1965:

| | | |
|---|---|---|
| White-collar --- | 44% | (32 million workers) |
| Blue-collar ----- | 37% | (26 million workers) |
| Service -------- | 13% | ( 9 million workers) |
| Farm ---------- | 6% | ( 4 million workers) |

Discussion Questions

1. What is an occupation?
2. What do you think are some of the basic differences between white-collar and blue-collar jobs?
3. What type of work do service workers perform?
4. Why do you suppose so many women are employed in white-collar jobs?

* * *

Learning about employment means knowing something about the work place and setting where the job is performed. Almost every occupation can be practiced in a number of different industries and enterprises. To get a better picture of employment in our economy, we can classify industries into nine major divisions. These industrial divisions represent roughly similar lines of economic activity. For example, the nine industrial groups can be divided into two general categories -- those that produce goods and those that produce services. The goods-producing industries harvest food and fiber, build houses and office buildings, extract minerals, and manufacture merchandise. The four goods-producing industries are: Agriculture; Contract Construction; Mining; and Manufacturing.

Those industries that produce services are involved in selling, governing, transporting, insuring, financing, producing utilities, housing, repairing, and personal grooming. The five service-producing industries are: Government; Transportation and Public Utilities; Trade; Finance, Insurance, and Real Estate; and Service and Miscellaneous. (Some manpower market analysts refer to employees in the last three industrial groupings as "gray-collar" workers.) In 1965 the goods-producing industries employed 26 million workers (40% of the total number of employed workers). The service-producing industries employed 39 million workers -- 60% of total employment. (The 7 million workers employed in 1965 were the self-employed, and the unpaid family workers. In the 1960's it is clear that our manpower force is occupied more with the production of services than with the production of goods.

* * *

Identify the following industries as either goods-producing or service-producing. Please mark your answer with either a "G" for goods-producing or "S" for service-producing.

Agriculture _____ Government _____

Trade _____ Mining _____

Manufacturing _____ Finance _____

Real estate _____ Construction _____

* * *

The occupational and industrial classification systems used in this course were established by the U. S. Department of Labor for presenting manpower data. (See lesson #30, p. 120 for a summary of the classification systems). The categories in these systems are the means of summarizing a great variety of occupations and industries. For example, the nine-fold occupational classification system (sometimes 11 categories when Service workers and Farm workers are each subdivided into two additional categories) summarizes a total of 25,000 to 30,000 occupations. There are approximately 250 industries in our economy, according to one classification system. These are summarized under nine industrial categories in the lessons.

The dynamic nature of our manpower market is illustrated by the number of changes that take place in the listing of jobs that is done by the U. S. Department of Labor. For example, the 1965 edition of the DICTIONARY OF OCCUPATIONAL TITLES (DOT) includes 6,432 jobs that were not listed in the 1949 edition, and drops many obsolete jobs. (The DOT is a standard reference volume that lists and defines various occupations in the economy and groups these jobs according to basic occupational, industrial, or worker characteristics.)

* * * * * * * * * *

## Today's Lesson in Brief

Jobs and workers can be classified according to occupations and the industries in which work is performed. These classification systems can be used to investigate and explore the thousands of different occupations in which more than 70 million American workess are employed. Currently, more Americans are employed in White-collar occupations (44%) than in any other occupational group; 37% of our employed labor force works in Blue-collar occupations; 13% are Service workers; and 6% are Farm workers. Looking at employment by industrial classification, we find that 60% of our workers are employed in the service-producing industries, while 40% of our workers are producing goods.

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## On Top in the Service-Producing Era

We are becoming a nation of white-collar workers. The time is approaching when more than half of our workers will be employed in white-collar occupations. Already, more men and women are employed in this occupational group than any other. It is worth while to look at the various types of jobs these white-collar workers have, note how many men and women are employed in particular white-collar occupations, and see the types of enterprises they work for. Information about white-collar employment can help you plan your own career by acquainting you with the occupations of 44% of America's workers.

* * * * * * * * * *

In the last lesson, we saw that 32 million men and women were employed in white-collar occupations in 1965. This is the largest of the four occupational groups -- bigger than Blue-collar, Service, or Farm occupations -- and accounts for 44% of total employment in the U. S. economy. What kinds of jobs do these white-collar workers perform?

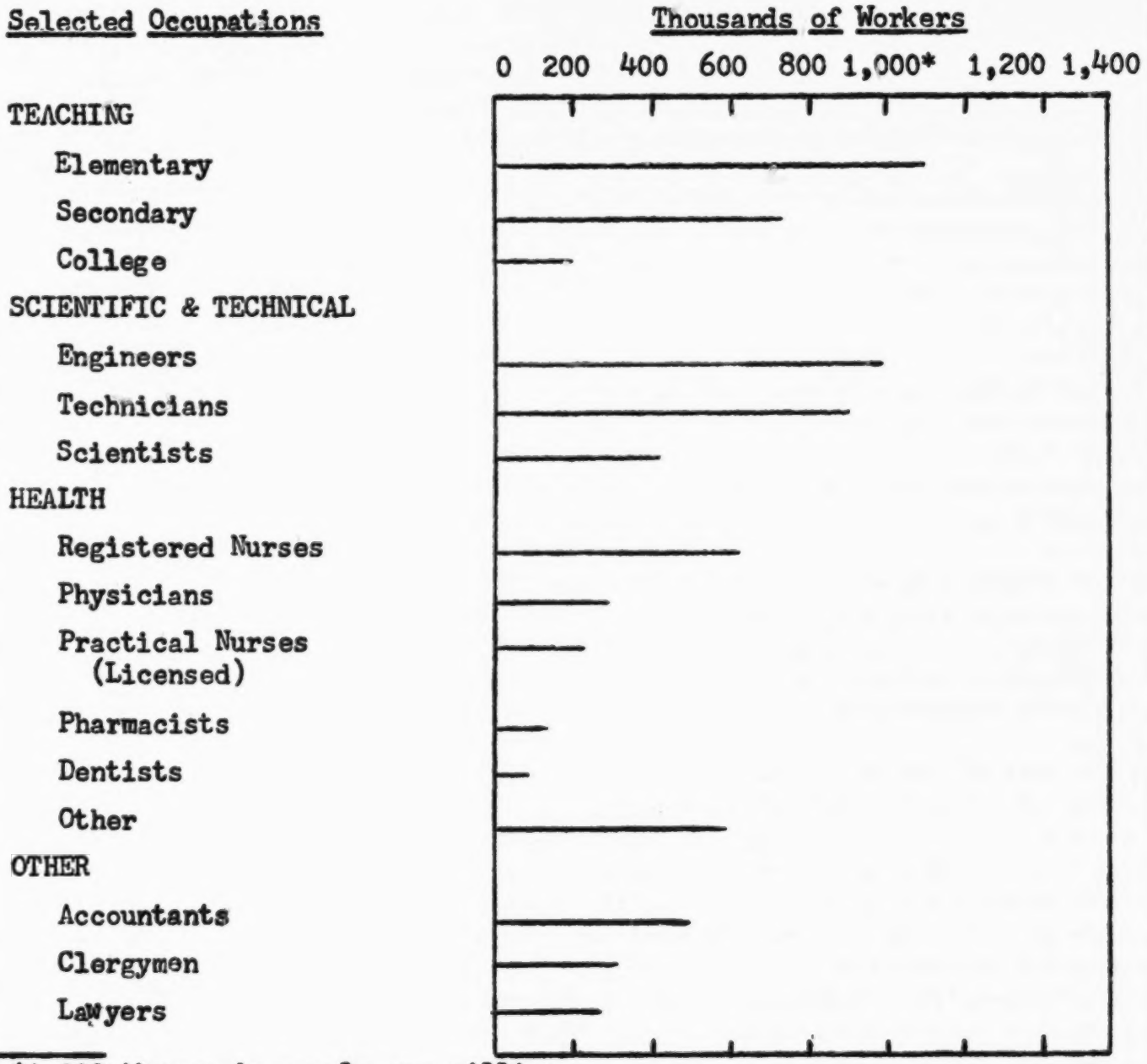
About 9 million white-collar workers in 1965 were employed in Professional and Technical occupations. (That's about 12% of total civilian employment.) These workers held jobs in such professional occupations as physician, lawyer, teacher, and scientist. They also held technical jobs in such occupations as draftsman, x-ray technician, and engineering aid.

One of the chief characteristics of professional work is that it generally requires either college graduation -- often with an advanced degree such as M.D., D.D.S., and L.L.B. -- or experience of such kind and amount as to provide comparable knowledge. Most professional occupations require theoretical knowledge of a specific field such as law, medicine, and engineering. However, there are some professions -- such as newspaper or magazine editor, musician, and actress -- that do not require as much specialized or theoretical knowledge. These professional jobs require a great deal of creative talent and certain skills that are acquired chiefly through experience.

The technical occupations are closely related to the professions. People in these jobs work closely with engineers, scientists, physicians, and other professional personnel. Employment in these technical occupations usually require a combination of basic scientific knowledge and specialized education or training in some particular aspect of technology or science. Such training is usually acquired by the worker through one of the following two methods: attendance at a technical institute, junior college, or other schools; or on-the-job training from a supervisor or a fellow worker who has already mastered the required information and skills.

Chart I lists the major professional and technical occupations. It shows, for example, that in 1965 there were two professional occupations -- elementary school teaching and engineering -- in which a million or more men and women were employed.

Chart I. EMPLOYMENT IN SELECTED PROFESSIONAL AND TECHNICAL (WHITE-COLLAR) OCCUPATIONS, 1965




*1,000 thousands equals one million

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 23.

Questions. Using the data in Chart I, please check the correct answer.

I-a. There were more than 40 million professional and technical workers employed in 1965. True____ False____.

I-b. In 1965, the number of elementary school teachers employed was greater than the combined total of high school and college teachers. True____ False____.

I-c. There were more technicians than scientists employed in 1965. True____ False____.

* * *

In 1965, about 6½ million men and 1 million women were Managers, Owners, or Officials of the nation's business, governmental, or private nonbusiness enterprises. Approximately 10% of our employed labor force is busy in the administration of the affairs of the various public and private organizations in our society. These men and women, whether working in large or small organizations or for themselves or others, make decisions and see that they get carried out. The soundness of these decisions, and how well they are carried out, has a great deal to do with the success or failure of our enterprises.

Managers and salaried officials account for about three-fifths of all workers employed in this administrative occupational group. Executives and other managerial personnel in business firms account for the largest part of this salaried manager group. However, there are also several hundred thousand people in this group who are officials of federal, state, and local government agencies and such nonprofit organizations as the Red Cross, private Foundations, and Boy Scouts and Girl Scouts.

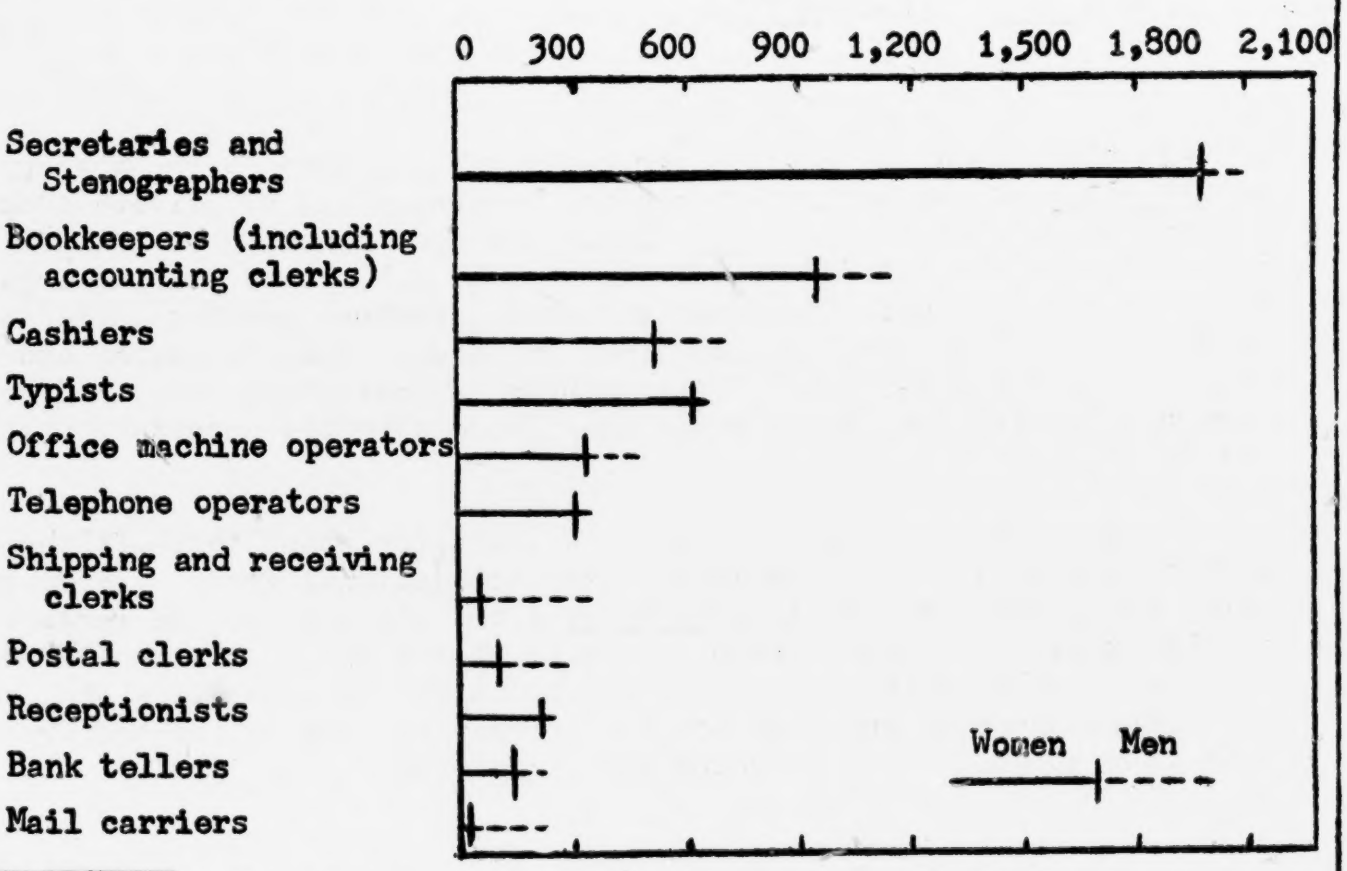
* * *

About 11 million people were employed in Clerical or closely related kinds of work in 1965. In other words, about 15% of total civilian employment is concerned with such activities as record-keeping, paperwork, and other office activity. Clerical workers perform such tasks as handling communication through mail, telephone, telegraph, and messenger services; attending to the shipping and receiving of merchandise; and ringing up sales on the cash registers of stores and restaurants. Their work involves jobs that vary widely in skill and experience requirements. E.g., executive. secretaries usually are highly skilled and have a great deal of experience and responsibility. On the other hand, the jobs of messengers and file clerks usually require little skill and experience.

Clerical occupations are dominated by women -- seven out of every ten clerical workers are women. In fact, more than half of all the girls who go to work after completing high school, find work in clerical occupations.

Chart II indicates the major types of occupations in which clerical workers are employed, by sex. It shows, for example, that in 1965 more than 2 million men and women were employed as secretaries and stenographers.

Chart II. EMPLOYMENT IN SELECTED CLERICAL OCCUPATIONS, 1965, BY SEX




SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 279.

Questions

II-1. Why are so many women employed as clerical workers?

II-2. Please check the correct answer.

a. There were in 1965 over a million bookkeepers and accounting clerks employed in the United States. True_____ False_____.

b. Men made up a sizeable portion of the total number of typists employed in 1965. True_____ False_____.

* * *

In 1965, nearly 5 million men and women -- 6.5% of our employed labor force -- were employed in sales and marketing work. Workers in this occupational group sell goods and services for manufacturers, insurance companies, and other producers. They work for wholesalers who stock large quantities of goods that are sold in smaller lots to retail stores. They also sell for drugstores, dress shops, and other retailers who deal directly with the public. A list of the items that sales workers sell would be practically endless -- including the entire range of goods and services produced by our economy.

Sales work varies a great deal. It includes people who have less than a high school education as well as those who are college graduates; those who travel in their jobs and those who do not; salaried employees and those who are self-employed; those who sell to business men and those who sell to consumers. Over half of all sales workers are employed in retail selling. One-fourth of the sales workers are employed part-time -- usually working less than 35 hours a week. Forty percent of those employed in sales work in 1965 were women -- primarily in retail stores. Men provide the greatest share of the sales force in wholesale, manufacturing, real estate, securities, insurance and other nonretail sales.

Questions

1. Retail selling accounted for more jobs in 1965 than all other types of sales work combined. Please check the correct answer. True_____ False_____.

2. In what type of sales work are women concentrated? Why do you suppose they are not employed in larger numbers in the other sales fields?

3. Of all the white-collar occupations, which ones do you think might offer the best career opportunities for you? Why?

* * *

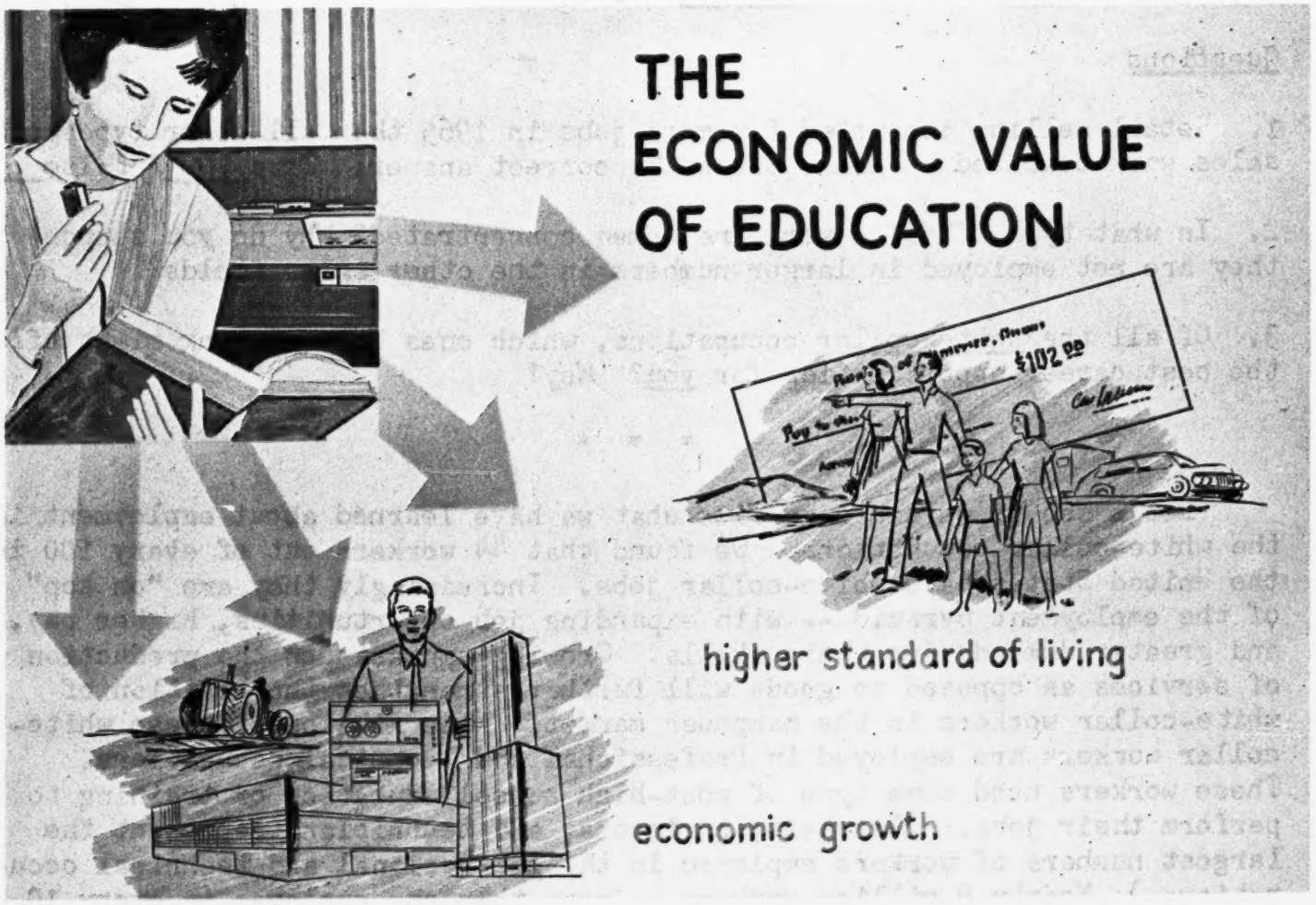
Let's see if we can summarize what we have learned about employment in the white-collar occupations. We found that 44 workers out of every 100 in the United States have white-collar jobs. Increasingly they are "on top" of the employment pyramid -- with expanding job opportunities, higher pay, and greater demands for their skills. Growing emphasis on the production of services as opposed to goods will further strengthen the position of white-collar workers in the manpower market. Nine million of these white-collar workers are employed in Professional and Technical occupations. These workers need some type of post-high school education or training to perform their jobs. (Teachers, engineers, and technicians represent the largest numbers of workers employed in the professional and technical occupations.) Nearly 8 million workers -- more than one employee in every 10 in the economy -- has a job as a Manager, Owner, or Official in our nation's enterprises. Another 11 million men and women -- 15% of our work force -- are employed with record keeping and other paperwork. These 11 million Clerical workers are predominantly women -- seven out of every ten. Sec-

retaries and stenographers account for one out of every five jobs in this group. Finally, almost 5 million men and women are employed in Sales work. Better than 50% of them are employed in retail sales. One out of every four sales workers is employed part-time; and 40% of sales workers are women.

* * * * * * * * * *

Today's Lesson in Brief

There are more white-collar workers employed in the U. S. economy than any other group of worker. These white-collar workers are employed in Professional and Technical jobs; Managerial; Clerical, and Sales occupations. White-collar workers play a key role in our service-producing era. Professional and Technical occupations and Clerical jobs have the greatest number of white-collar workers. In a number of white-collar occupations, such as office work and retail selling, women play a very important role.




Additional education and training often are necessary to qualify for white-collar employment. In an economy which is increasingly service-producing, these workers make important contributions to economic growth and share in America's rising standard of living.

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## An Affair of the Heart

Work is seldom all good or all bad for the worker. Most jobs have both positive and negative values for a worker. If the positive values are great enough, the job can make a major contribution to the satisfactions that a worker gets from life. For example, an artist who views his work both as a way of earning a living and as an opportunity for creative expression may be well satisfied if he gets moderate rewards relative to each. Another artist, who may earn a lot of money from his commercial-art business, may be unhappy if he gets little creative pleasure from his work. The person who plans his or her career wisely can derive great satisfaction from work and from life.

* * * * * * * * * *

Consider the following questions as you read the biographical sketch of Dr. Nina Braunwald:

1. Why does she work?
2. What satisfactions do you feel she gets from her job?
3. What limitations does her job place on her family and social life?
4. Are these same limitations evident with a man's job also? Why or why not?

* * *

### NINA STARR BRAUNWALD: "MOTHER IS A SURGEON"*

In every sense of the word Nina Braunwald, a slender, brown-eyed and very feminine brunette, is a specialist in affairs of the heart. A devoted wife and mother, in her mid-thirties Dr. Nina Starr Braunwald is the first woman in the United States certified by the American Board of Thoracic Surgery (specializing in heart, lungs, and esophagus), and the only woman presently doing open-heart surgery.

In September 1963 the National Institute of Health clinical center at Bethesda, Maryland (the world's largest medical research complex) dedicated its new two million dollar heart and brain surgery wing. While the dedication ceremonies were going on, two delicate operations were simultaneously in process on the third floor -- one performed by Dr. Andrew G. Morrow, chief of heart surgery, the other by Dr. Nina Starr Braunwald.

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*Adapted from: Lily Jay Silver, Profiles in Success, Forty Lives of Achievement, N.Y., Fountainhead Publishers, Inc., 1965, pp. 47-53.

Dr. Nina cut open the chest and leg of a young woman, attached a heart-lung machine, stopped the patient's heart and then replaced a constricted mitral valve. She then surgically sewed into the patient a small metal cage containing a white plastic sphere resembling a miniature ping-pong ball. On a wall in the observation rooms, electronic instruments recorded such vital data as blood flow rates, blood pressure, heartbeats, blood loss, and body temperature.

Spiked waves moved across screens adjacent to each set of records, so that the audience -- topflight surgeons in the United States -- could observe the progress. It must have been a dramatic moment, even to eminent surgeons, to observe the skill of the brilliant young woman performing this difficult operation. The evening after surgery Dr. Morrow's and Dr. Braunwald's patients, both rheumatic fever suffers in their childhood, were reported doing well.

* * *

It takes courage literally to hold a life in your hands. Nina Braunwald is numbered among the courageous young Americans, the leaders who remove barriers and help pioneer in new fields that are developing in this fast-moving age.

Although the crusade to allow women to receive a medical education and to practice medicine in the United States began as recently as 1845, women actually have been physicians from earliest times. In Medieval Europe, women could study at most universities and were professors at some schools. In sharp contrast, in England, King Henry V ordered that any woman practicing medicine would be put in prison.

During our Civil War and the two World Wars, when many physicians were called to the battlefields, the acceptance of women into medicine was accelerated. Women doctors have contributed their time and skills -- and the added gifts of maternal instinct and woman's intuition -- to many branches of medicine. The world's first clinic for the mentally retarded child was begun with a woman doctor as administrator; and women physicians administer and staff programs for the deaf, the crippled and the poor who are ill.

* * *

Ever since high school days Nina Starr knew her destiny. Her father and uncle are practicing physicians, and a world of medical interests and contacts was her environment. "It just seemed the natural thing for me," she recalled.

But what prompted her to choose, of all branches of surgery, one of the newest, most difficult, and challenging? She was deeply interested in heart surgery, she says, adding thoughtfully, "Medicine, I suppose, is like writing. While there are magazines, novels and newspapers, all writers are usually lumped together. It is only when one is in the field of writing that one recognizes the differences in mediums."

How is this achieved? A full-time, pleasant young nurse cares for the children while their mother is at the hospital. Dr. Nina, who admits that she does not really enjoy cooking, rises at seven and prepares breakfast for her family so they can all start their day together.

At home she always dresses for comfort. When she washes dishes, she wears rubber gloves to protect her surgeon's hands. As is true of other workers, surgeons feel the need for relaxation. Dr. Nina shows an artistic side to her nature by painting and sculpturing in the gardenhouse of the Braunwald home. She has had no formal training in sculpture, but admits with modesty that "after studying medicine one learns so much about anatomy that sculpture is just a natural consequence." She finds it particularly relaxing to paint abstracts in oil, which satisfies her love of colors.

Despite all of their busy activities, the Braunwalds still find time for an occasional horseback ride together in the natural woodlands of Rock Creek Park or Potomac Park. Much of their home life centers around their two little girls, Karen and Denise.

* * *

Now that you've read about Dr. Nina Starr Braunwald, can you answer the questions listed at the start of the case?

1. Why does Nina Braunwald work?
2. What satisfactions does she get from her job?
3. What limitations does her job place on her family and social life?
4. Are these same limitations also evident with a man's job? Why or why not?

* * * * * * * * * *

Today's Lesson in Brief

What did you learn from the case study of Dr. Nina Starr Braunwald? What major themes and concerns that we have studied in this course are illustrated in her life story? In the space below, write down at least five specific themes, or as many as you can think of.

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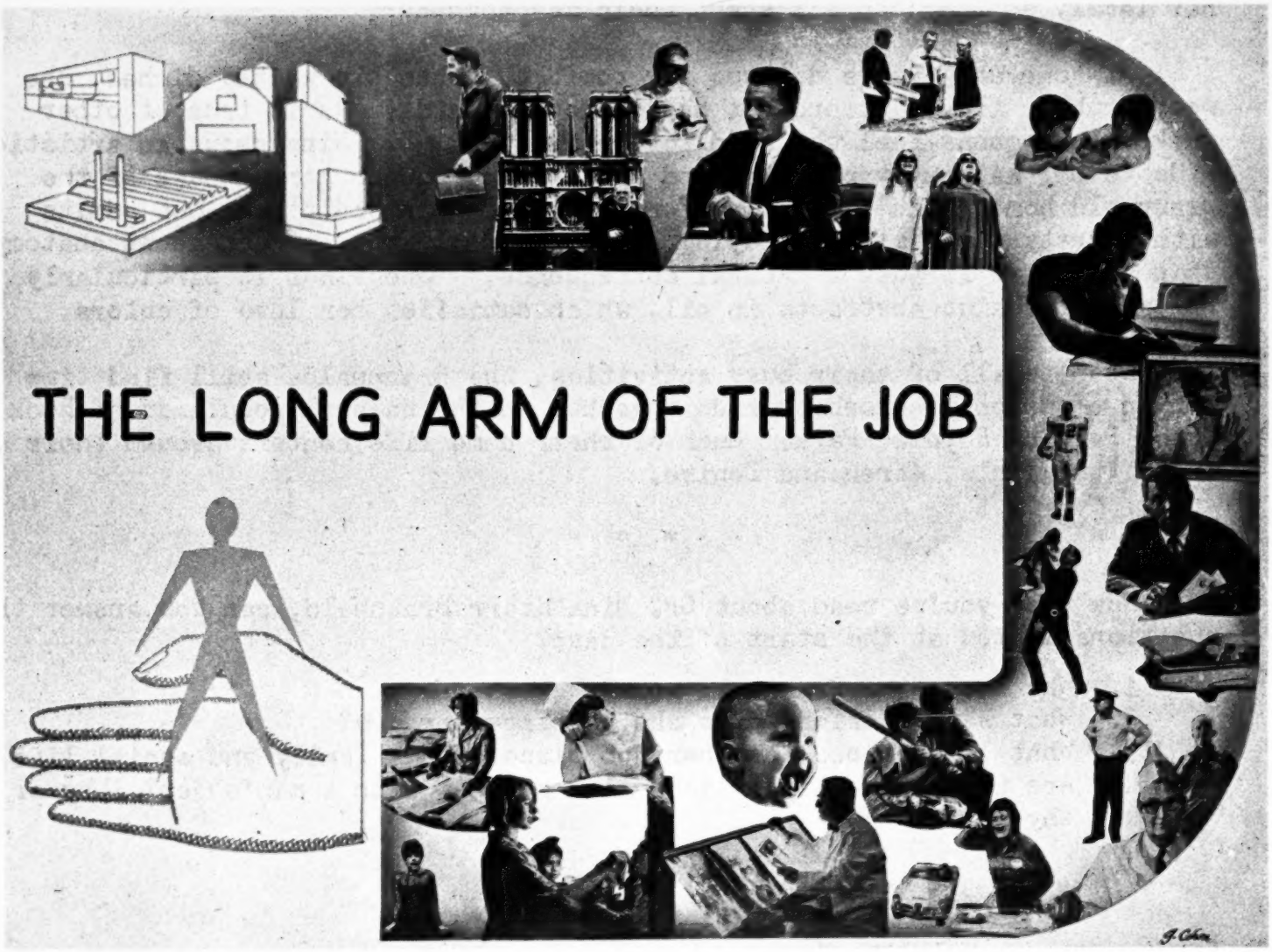


A job is more than just a way to earn a living. The work that a person does often influences his whole outlook on life and the way he lives. The "long arm of the job" extends beyond the work place and work day: it reaches into home life and leisure time and influences ideas, ideals, attitudes, interests, manners, clothes, and even speech.

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## Farm, Blue-collar, and Service Workers

Farm workers provide us with the food and fiber necessary for our health and comfort, indeed for our very survival. However, Blue-collar and Service workers also provide our economy with essential goods and services. These three groups of workers -- Farm, Blue-collar, and Service -- all combined, comprise more than half of our total employed labor force; and their skills and muscle are vital to the operation of our economy. In this lesson, we will look at the number of workers in each of the three occupational groups and some of the specific jobs they perform.

* * * * * * * * * *

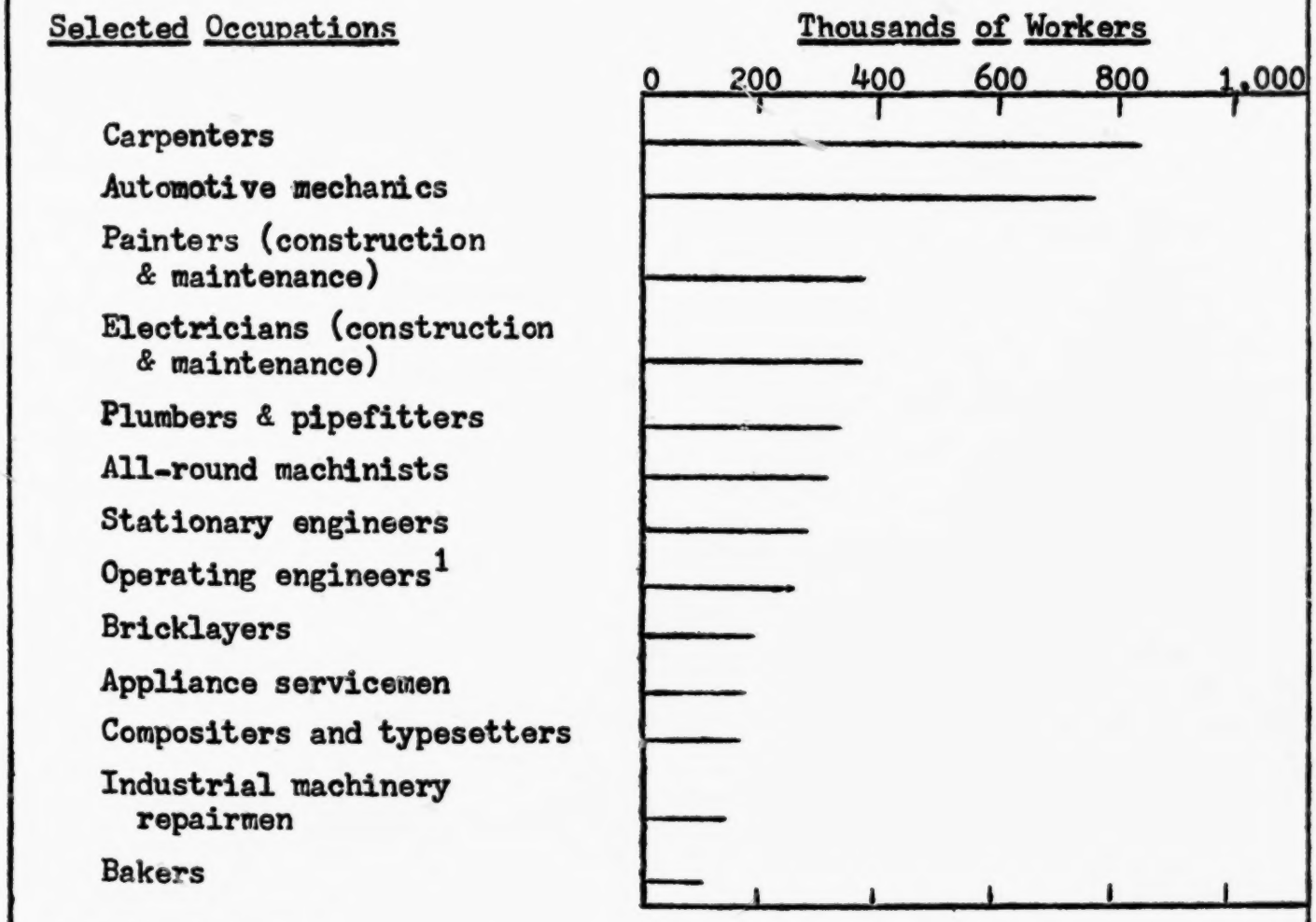
Let's begin our exploration of the employment of farm, blue-collar, and service workers in our economy by taking a detailed look at the largest group of the three: the Blue-collar occupations. In 1965, 26 million workers were employed in blue-collar occupations. Roughly one out of every three workers in the entire economy in 1965 was employed in a blue-collar occupation as a skilled, semiskilled, or unskilled worker.

Roughly one-third of all blue-collar workers are classed as skilled. In 1965, there were 9 million of these skilled workers employed in the American economy. They include craftsmen and foremen working in the building trades, printers, bakers, those who operate and maintain equipment, repairmen, and workers responsible for making the patterns, models, tools, dies, machines, and equipment without which the industrial process could not be carried on. One-quarter of our skilled workers repair the equipment used in industry and the mechanical equipment and appliances used by consumers. About one-third of our skilled workers are employed constructing homes, commercial and industrial buildings, and highways. In 1964, there were at least 13 different skilled occupations in which 100 thousand or more workers were employed. However, many skilled occupations are small in number. For example, there are fewer than 20,000 workers employed as electrotypers, blacksmiths, and glazers.

Although skilled workers are employed in almost every branch of industry, more than half are in manufacturing and construction. In the building trades, a large percentage of craftsmen are self-employed. Only a small proportion (less than 4%) of the skilled blue-collar workers in our economy are women.

Chart I on the next page shows 13 skilled occupations, each of which employed more than 100,000 workers in 1964. For example, it indicates that more than 800,000 carpenters were employed -- more than any other skilled occupation.

Chart I. ESTIMATED EMPLOYMENT IN SKILLED OCCUPATIONS, 1964




[1]Excavating, grading and road machinery operators.

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 361.

Questions concerning Skilled Workers

I-1. How would you explain the large number of automobile mechanics that are employed in the economy?

I-2. Which of the 13 skilled occupations listed in the chart do you suppose will show the greatest relative growth in employment during the period 1964-1975?

I-3. Please check the correct answer.
a. In 1964, there were about 750,000 automobile mechanics employed.
True_____ False_____.
b. Skilled occupations in the construction industry cccounted for about one-third of total employment in skilled trades in 1964.
True_____ False_____.
c. There were over 400,000 machinists employed in 1964.
True_____ False_____.

Now let's look at another category of blue-collar workers -- the semi-skilled, or "operatives". With over 13 million workers, this is the largest occupational sub-group in the nation's labor force. Almost one out of every five workers employed in the U. S. economy in 1965 was in a semiskilled occupation.

In general, semiskilled or operative workers rely primarily on their hands to do their work. Many of these workers use a variety of hand tools such as screwdrivers, pliers, files, soldering irons, measuring devices, and cutting tools. They also make simple adjustments and do minor maintenance work on the machines they operate. Some operatives are also required to keep simple records of their work. Millions of semiskilled workers operate power-driven machines in factories. Many use sewing machines for making clothing, awnings, and other items. Others operate machines to stamp out metal parts; still others use machine tools, such as lathes and milling machines, to shape metal to precise sizes.

A considerable number of semiskilled workers operate equipment that is used in handling and moving materials, such as powered forklift trucks to move raw materials and manufactured products from place to place in factories. Large numbers of semiskilled workers are employed as assemblers and inspectors. Assemblers install components into finished products, such as radio and television sets. Inspectors examine and test the products to see if their quality meets specific standards. Many semiskilled workers in factories are employed as helpers to assist workers who are more highly skilled. For example, there are firemen who help the skilled stationary engineers operate and maintain steam boilers and heating plants.

About 8 million semiskilled workers are employed in manufacturing industries principally as machine operators, material movers, assemblers, and inspectors. They help produce such things as clothing, automobiles, food, machinery, and electrical and electronic equipment. Outside of manufacturing four semiskilled workers out of every 10 are drivers.

Over 25% of all semiskilled workers are women. The number of women operatives employed in the different industries varies considerably. Eight out of every 10 operatives in the apparel industry are women. They also have a good share of semiskilled jobs in the textile and food industries -- as sewing machine operators, packers and wrappers, assemblers, and laundry and dry cleaning machine operators. On the other hand, the iron, steel and petroleum industries employ relative few women in operative jobs.

Questions concerning Semiskilled Workers

1. What percent of workers in 1965 were employed in the semiskilled occupations?

2. What type of workers account for the largest number of semiskilled jobs?

3. Why is the proportion of women smaller in semiskilled occupations than in clerical and sales jobs?

* * *

In 1965 there were about 4 million unskilled laborers working in industries other than farming and mining. (Unskilled is the third, and last, sub-group of Blue-collar workers.) What sort of work do they do? Loading, unloading, digging, hauling, hoisting, wrapping, mixing. Some jobs involve very heavy physical work, but do not require much education or specialized training. Unskilled manual workers are employed mainly in manufacturing firms (1.1 million), on construction work (805,000), in wholesale and retail trade, and in transportation jobs.

Question: Why do you suppose there are relatively few jobs for unskilled laborers in today's economy?

* * *

Leaving the blue-collar workers, we turn now to another major occupational group: Service workers. Let's see how many Service Workers there are in the U. S. economy, and the type of job they perform. In 1965, more than 9 million service workers were busy policing our streets, serving food, putting out our fires, and helping clean our houses and buildings. They are employed as baby sitters, elevator operators, golf caddies, barbers, and theater ushers. Private household workers, over 2 million of them, as their name indicates, are employed in private homes preparing and serving meals, making beds, doing cleaning and laundering, and taking care of children. Ninety-seven out of every 100 workers in this type of service work are women. About two-thirds of all private household workers are employed part-time 35 hours or less a week.

Nearly 1 million Protective service workers protect our lives and property from harm or damage. The great majority of these workers are policemen, guards, and firemen, employed by our local, state, or federal governments.

The other service workers -- about 6 million in all -- comprise a group primarily dealing in Personal and building services. About 2 million of these workers prepare or serve food for us to eat in restaurants, hotels, and institutions. Another 2 million clean and service our buildings. Roughly 600,000 service workers are employed as barbers and cosmetologists.

Questions concerning Service Workers

1. About how many service workers in 1965 were employed as private household employees?

2. Personal and building service workers accounted for about what portion of the total number of service workers employed in 1965? Please check the correct answer. One-third_____ One-half_____
Two-thirds_____ Three-quarters_____.

* * *

The last of the four major occupational groups -- after White-collar, Blue-collar, and Service Workers -- is the Farm Worker. There is an old song that goes: "The farmer is the man, The farmer is the man, The farmer is the man who feeds them all." Farmers and farm managers, laborers, and foremen are among the most productive and essential workers in our economy. (In the last 20 years, farm productivity has increased at double the rate of the rest of the economy. In fact, the Farmer has been so efficient, he has been working himself out of a job.) In 1965, there were 4.3 million farm workers -- 2.3 million farmers and farm managers, and 2 million farm laborers and foremen. They produce the food and fiber so essential to the consumer's well-being, and which provides raw materials for many American industries.

Most of the workers on farms are either self-employed farmers or are members of farm families. The number of hired workers on farms (including family members who are paid wages) is subject to seasonal fluctuations. For example, in the month of January there are only about 800,000 hired farm workers employed, while at the peak of the harvest in September, the number will be about 2 million.

* * *

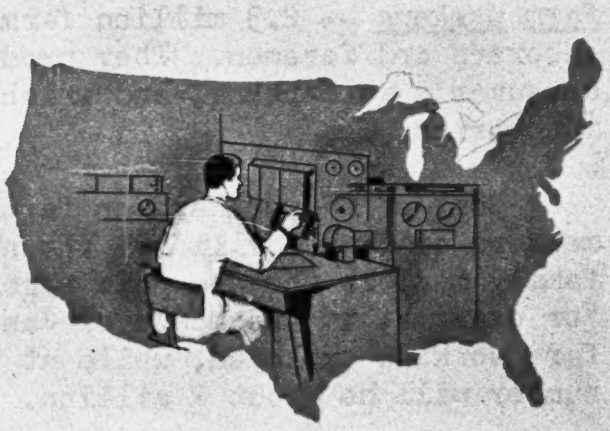
In this lesson we have seen that 4 million Farm Workers produce the food and fiber which is so essential to the well-being of the American people. Our physical, social, and psychological welfare is protected and cared for by 9 million Service Workers. Overshadowing these numbers, there are 26 million Blue-collar Workers. Better than one-third of these blue-collar workers are skilled craftsmen and foremen whose work is so essential to the operation of American industry. Almost half our blue-collar workers are semiskilled operatives who run machines, assemble products, drive vehicles, and inspect goods in our factories. Four million unskilled blue-collar laborers provide muscle power for our economy. Together with the nation's White-collar workers, these Farm, Service, and Blue-collar workers perform the many thousands of different jobs required in our highly specialized and interdependent economy.

* * * * * * * * * *

Today's Lesson in Brief

More than one-half of our workers are employed in Farm, Blue-collar, or Service occupations. These workers play important roles in our economy -- feeding us, producing our manufactured goods, and serving our personal and protective needs.

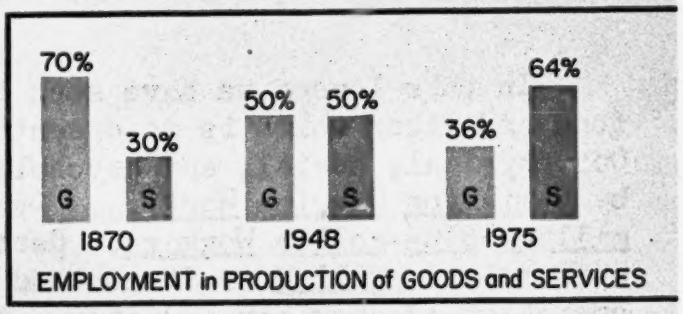
# THE CHANGING AMERICAN ECONOMY



*HUMAN RESOURCES ERA*
***PRESENT***

*INDUSTRIAL ERA*
***1890's-1960's***

*AGRICULTURAL ERA*
***TO 1890's***




EMPLOYMENT in PRODUCTION of GOODS and SERVICES

In the Human Resources Era the most important factor of production (or input) for our economy is the <u>brainpower</u> of man. The muscle power that was so important for our past economic development now plays a less significant role. Increasingly, the dominant output of our economy is not goods, but human services. This shift to the production of services influences employment opportunities as shown in the chart above. By 1975 nearly two-thirds of America's work force will be employed in the production of <u>services</u> rather than goods.

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## Making Something Out of Your Job

A person's job requireshim to do certain things and therefore to a certain extent molds him to fit the job. But workers themselves also have some control over the job. A worker may define the nature and meaning of his job through his ideas and attitudes toward his work. Often he can make something important and personally satisfying out of his job by the way he approaches and carries out the work.

* * * * * * * * * *

CASE #1

A janitor was asked to explain his job to the delegates of a valleywide conference held by the Tennessee Valley Authority. Here is what he said:

> "I represent the janitors. We believe that a clean plant is an efficient plant. I think the other workers in the plant like a clean plant to work in -- better working conditions. This helps them produce more efficiently and provide inexpensive electric power and better flood control. And this gives the people of the Tennessee Valley a better life."

Consider these Questions: How does this man view his job? How does the organization he works for make him feel about his role? Notice how the factor of "personal involvement" in work not only helps make the job more satisfying to the worker but also encourages him to do a better job.

* * *

CASE #2

Now, as you read the following statement (made by an aircraft worker), contrast how this man views his job with how the TVA employee looks upon his job:

> "You take this doohickus here -- I don't know what they call it. My job is to drill three holes in a triangle shape. All I do is set my pattern on the plate and drill the holes. They tell me it fits somewhere in the wing section. Morgan, the shop foreman, was giving

me some bull about how the airplane would fall apart without my three holes. Well ain't that great! Look, all I want is my $2.80 per hour. If three holes in a triangle will do it, that's fine. If they want 'em in a straight line, just give me the pattern and I'll do it, just so long as I draw my $2.80."

Questions

1. What is this worker interested in? What does his job mean to him?
2. What are his aspirations and occupational goals?
3. If you were his superior, would you promote him to a more complex and responsible job?
4. Do you feel that this aircraft worker's view is typical of most assembly-line workers today?
5. How do you explain his attitude? Is pride in workmanship very common?

(Remember Thorstein Veblen's ideas about the "instinct for workmanship"? That was his term describing the basic human desire for activity "tailored to the efficient achievement of a goal." Emphasis is put on the pride and pleasure that comes from seeing a job well done, a goal accomplished. An example would be Paul Revere, the silversmith, working to create a beautiful teapot or other item and then viewing the beauty of his creation after its completion.)

* * *

CASE REPORT #3

The following report shows another example of the attitudes some workers have toward the job. As you read the next situation, consider these questions:

1. What changes could be made in this work situation to make the work more satisfying?
2. What types of jobs can you think of that give workers some control over the work they do and how they do it?

"One of the fascinating discoveries from a study of THE MAN ON THE ASSEMBLY LINE (by two industrial sociologists) is the way in which the men, disliking the mechanical harness to which they are 'hitched', sought to 'buck the line' and in some small way to introduce variety in the job and make their own work rhythms. One way was to build 'banks', that is, to accumulate a number of small assemblies of items; or by working up the line very fast and then catching a breather. The most popular jobs in the plant were those of utilitymen, foremen, and repairmen -- those least resembling assembly-line jobs. The utilitymen, who act as substitutes for the line men at various times, spoke of getting an idea of the whole line, or meeting and

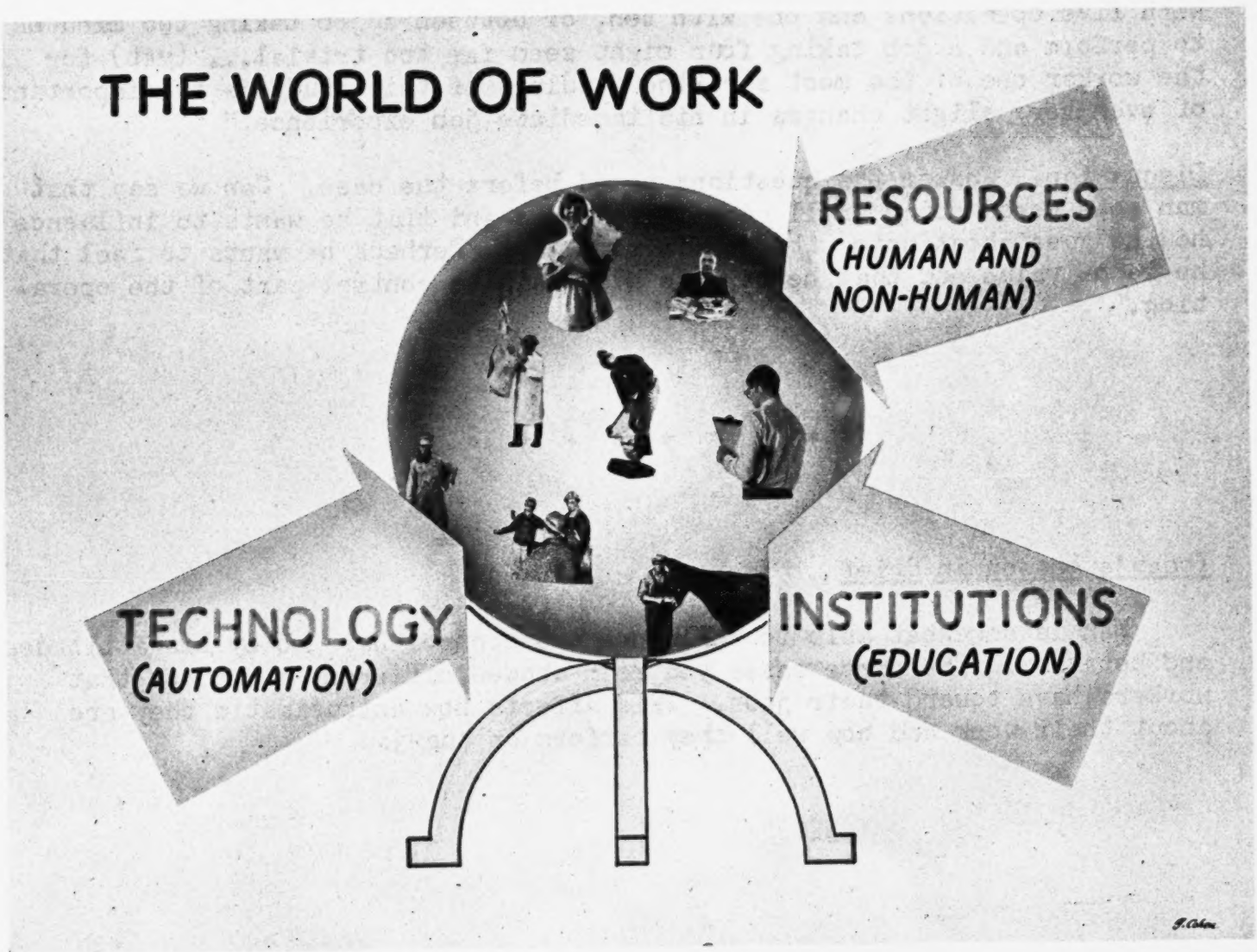
talking with different workers and of knowing all the jobs. To one unfamiliar with assembly line work experiences, the difference between a job with five operations and one with ten, or between a job taking two minutes to perform and a job taking four might seem far too trivial... (yet) for the worker one of the most striking findings of this study is the importance of even very slight changes in his immediate job experience."

Discussion. Answer the questions posed before the case. Can we say that man gets bored doing small repetitive tasks and that he wants to influence how he goes about doing the job in some way? Perhaps he wants to feel that he is of value and that he can use his brain to control part of the operation.

* * * * * * * * * *

Today's Lesson in Brief

Man is somewhat able to influence and control his job by his attitudes and behavior. The three cases you read showed different attitudes that workers have toward their jobs. This affects how enthusiastic they are about their work and how well they perform on the job.




How successful you are in "making something out of your job" will depend largely on the adjustments that are made among the interacting forces of resources, technology, and institutions. The amount and kinds of satisfaction or disappointment you get from your job will be influenced by how well technology and institutions are adapted to meet <u>your</u> needs as a worker and person rather than just meeting the technical demands of a production process.

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## "A Sure Sense of His Own Usefulness"

At the close of his 1967 Manpower Report, President Johnson said that one of our most important national goals is to offer to every citizen "a sure sense of his own usefulness." Do all workers feel useful and get satisfaction from their jobs? Do professionals and highly skilled workers get more satisfaction from their jobs than unskilled workers, or is it the other way around? How do workers rate various factors concerning their jobs?

* * * * * * * * * *

The following table is based on a national sampling of 2,460 "normal, stable" American workers (about 10 years ago). It gives a summary of personal attitudes and evaluations regarding their jobs.

(When reference is made to "Professionals and Technicians," this implies high prestige jobs that require considerable education and/or training, such as those held by doctors, lawyers, accountants, and engineers. "Skilled" workers are trained for particular jobs, but are not as highly trained as the professional worker. "Unskilled" workers are assigned relatively simple jobs which do not require training before obtaining the job.)

Table I. RELATIONSHIP BETWEEN OCCUPATIONAL GROUPS AND JOB SATISFACTION MEASURES AMONG EMPLOYED MEN

| How workers rated themselves: | Professionals & Technicians | Skilled Workers | Unskilled Workers |
|---|---|---|---|
| -OVERALL JOB SATISFACTION | | | |
| Very Satisfied | 42% | 22% | 13% |
| Satisfied | 41 | 54 | 52 |
| Neutral | 11 | 16 | 19 |
| Dissatisfied | 3 | 7 | 16 |
| -REPORT OF WORK PROBLEMS | | | |
| Had problems | 36% | 25% | 21% |
| Had no problems | 64 | 75 | 78 |
| -FEELINGS TOWARD OWN PERFORMANCE ON THE JOB | | | |
| Very good | 37% | 24% | 17% |
| Little better than average | 46 | 45 | 31 |
| Just average or not very good | 13 | 29 | 38 |

SOURCE: G. Gurin, J. Veroff, and S. Feld, Americans View Their Mental Health, 1960, p. 163.

Refer to the information given in Table I above, and be ready to discuss these questions:

1. Which workers probably have the most "control" over their jobs -- planning what to do, supervising others, deciding how to do the job?

2. Does having "control over the job" determine how satisfied they are with their jobs?

3. Do the people who have more control over their jobs also have more work problems? Why or why not?

4. Why do you think the skilled and unskilled workers are less satisfied with their jobs?

5. Is there a relationship between the skill level that a job requires and a worker's view of his own performance on the job?

* * *

We must recognize that each person has different needs and different skills and abilities that he brings to a job.

Certain working conditions seem to be more important to some workers than to others. Let's view a tabulation of studies that show what factors seem most important to different groups of workers.

The following table gives the results of studies made of 325 women factory workers, 100 men and women department store employees, and 150 miscellaneous men and women workers.

Table II. IMPORTANCE OF CERTAIN FACTORS TO DIFFERENT GROUPS OF WORKERS

| Factors:* | Factory Workers (women) | Department Store Workers | Miscellaneous Workers | Average (by combining data from 3 studies) |
|---|---|---|---|---|
| Steady work | 1 | 2 | 2 | 1 |
| Comfortable working conditions | 2 | 8 | 8 | 7-8 |
| Good working companions | 3 | 7 | 7 | 6 |
| Good boss | 4 | 5 | 5 | 4 |
| Opportunity for advancement | 5 | 1 | 1 | 2 |
| High pay | 6 | 6 | 6 | 7-8 |
| Opportunity to use your ideas | 7 | 3 | 3-4 | 3 |
| Opportunity to learn a job | 8 | 4 | 3-4 | 5 |
| Good hours | 9 | 9 | 9 | 9 |
| Easy work | 10 | 10 | 10 | 10 |

*Each worker was asked to rank these different job factors "1,2,3...10" on the basis of how important they were to him in his own personal judgement.

SOURCE: Norman Maier, Psychology in Industry, 3rd Edition, 1965, pp. 472-473.

Some implications of the information in Table II:

1-- Steady work is a very important item for all groups. (Why? Because it helps satisfy their need for economic security.)

2-- Good hours and easy work, on the other hand, are relatively unimportant, suggesting that workers don't insist on having everything arranged to suit their own personal convenience.

3-- Employees are willing to do a good day's work but, in return, they want fair treatment, security, and a reasonable opportunity to improve themselves.

4-- Women seem to value comfortable working conditions and congenial working companions more than do men.

5-- Many items vary in importance among workers, depending upon the type of work and work situation.

Question: Do any of these findings surprise you? Which ones?

* * *

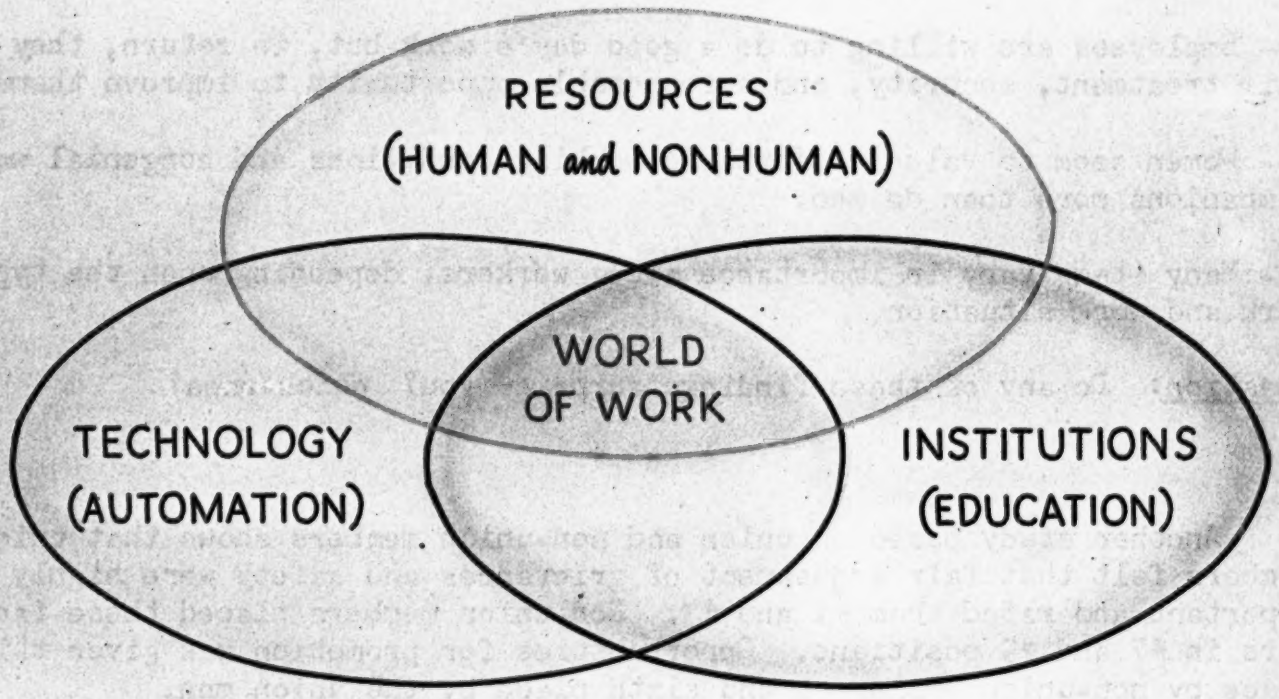
Another study based on union and non-union members shows that union members felt that fair adjustment of grievances and safety were highly important and rated them #1 and #3. Non-union members placed these factors in #7 and #9 positions. Opportunities for promotion was given third place by non-union employees and sixth place by the union men.

* * * * * * * * *

Today's Lesson in Brief

Some people are more satisfied in their work situation than others. Workers in the same type of job get different kinds and amounts of satisfaction -- in part because they rank their needs differently. Research studies show, for example, that professional and technical workers felt more satisfied with their jobs, but the unskilled felt they had fewer problems. Workers who had more of a chance to use their own skills and initiative seemed to be happier about their performance on the job. And steady work and opportunity for advancement seemed more important to these workers than high pay alone.

# THE CHANGING WORLD OF WORK




Whether a job provides a means for us to find a sure sense of our own usefulness will depend upon what happens in the work place. The types of experiences we have in the world of work are related to our changing technology, resources, and institutions. One of the chief characteristics of the Human Resources Era is that today we are asking basic questions about the meaningfulness of work that men and women perform. We are also concerned about what, if anything, our jobs add to the dignity of man. We are increasingly talking about changing the ways we use our resources (especially human resources) and technology to produce the nation's output of goods and services. A beginning note has been sounded calling for improvement in our institutions so that we can create a world of work in which all the needs of man shall be considered.

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/N8/#39

## They Get the Work Done in American Industry

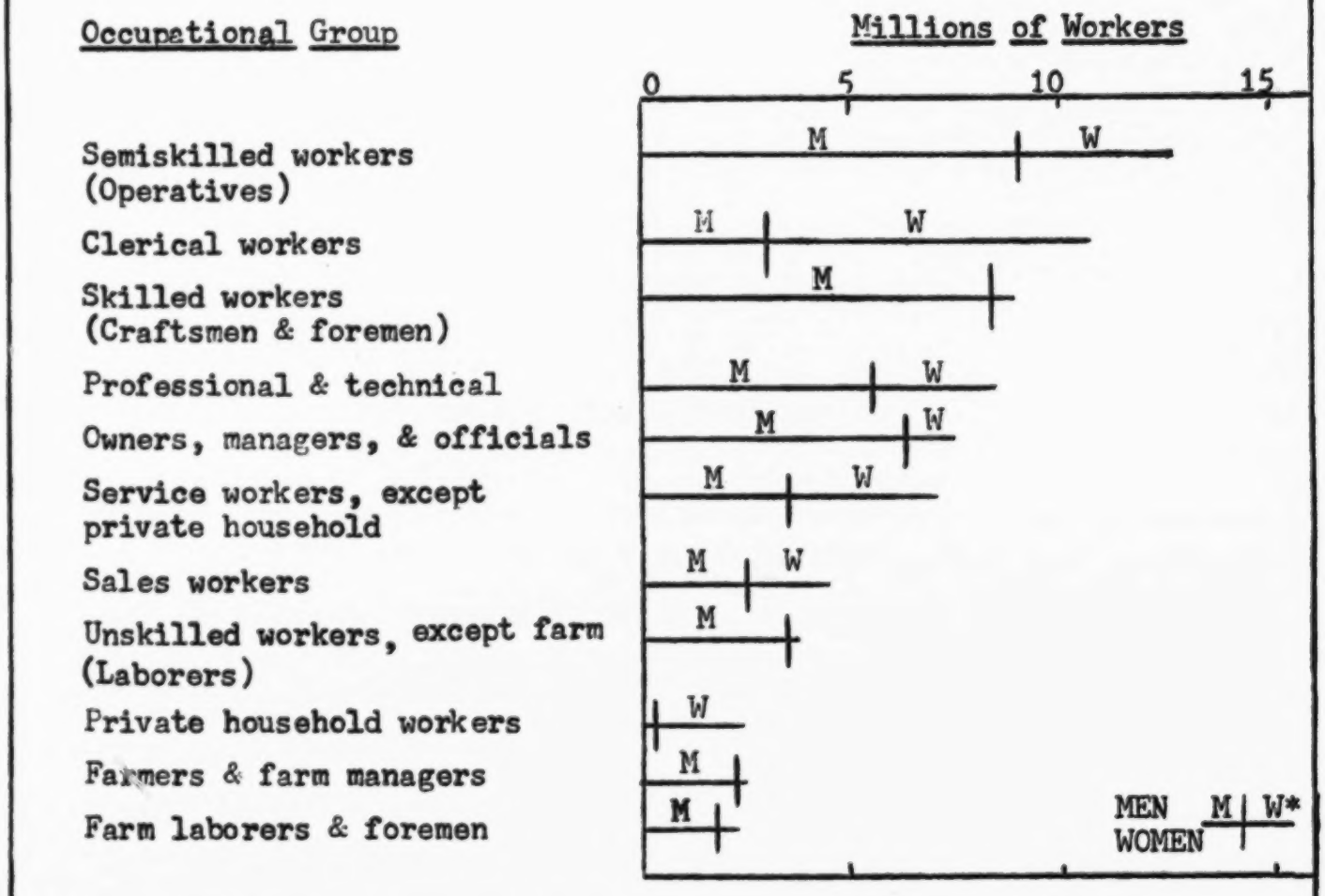
In this lesson we will summarize some of the data and concepts we have been using to explore the occupational and industrial sources of employment in the U. S. economy, and present additional data in a somewhat different format. Employment in 11 occupational and 9 industrial groups will be examined to compare the number of jobs in each. You can use this knowledge of contemporary employment patterns to identify the sources of jobs in our economy, and in planning your career.

* * * * * * * * * *

One way we can pick the trees out of the forest of data we have presented the last several days, is -- believe it or not -- to present some more data. (Still another way to study the occupational and industrial sources of jobs is to take a look at your teacher's copy of the OCCUPATIONAL OUTLOOK HANDBOOK. This book describes jobs and provides a wealth of data on employment by occupation and industry in the U. S. economy.) We will take a look at three charts which show occupational and industrial employment in the United States for a recent year. They will help us identify the relative importance of various occupations and industries as <u>sources of jobs</u>.

Chart I shows total employment, by sex, in the United States in 1964 in each of 11 occupational groups. Semiskilled workers were the largest occupational group in our economy, including 9 million <u>men</u> and 4 million <u>women</u>. In that year, there were about 2 million more Semiskilled Workers than the second largest occupational group, Clerical Workers.

Chart I. EMPLOYMENT IN THE UNITED STATES BY OCCUPATIONAL GROUPS, 1964




*To the left of the vertical line, number of MEN employed. To the right of the line, number of WOMEN employed. Length of line = total employment.

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook 1966-67 Edition, p. 10.

Questions from Chart I

I-1. How many women were employed as Clerical Workers in 1964?

I-2. In what occupational groups were there more than 5 million men employed?

I-3. In what three occupational groups did women represent about 50% or more of all employed workers?

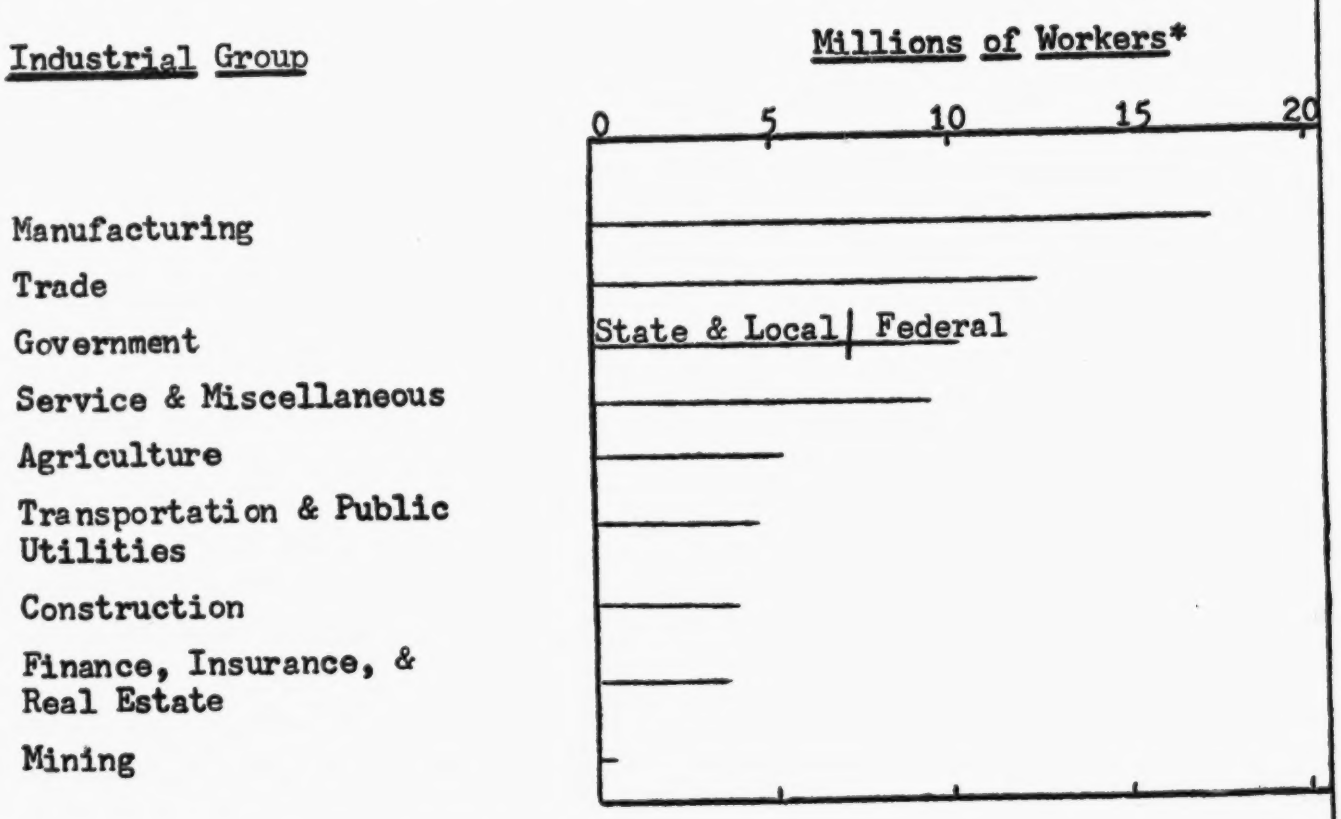
I-4. About how many workers were employed in all kinds of farm work in 1964?

I-5. All types of service workers combined accounted for more employment in 1964 than did Skilled Workers. Please check the correct answer. True_____ False_____.

* * *

Chart II indicates the total amount of employment in 1964 in each of the nine major industrial groups in our economy. For example, it shows that there were about 5 million workers employed in the agriculture industry. This means that there was just about one-half as many workers employed in agriculture in 1964 as there were in government.

Chart II. EMPLOYMENT IN THE UNITED STATES BY INDUSTRY GROUPS, 1964.




*All wage and salary workers except agriculture
SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 11.

Questions. Using the data in Chart II, please check the correct answer.

1. Trade accounted for more employment in 1964 than did agriculture. True_____ False_____.

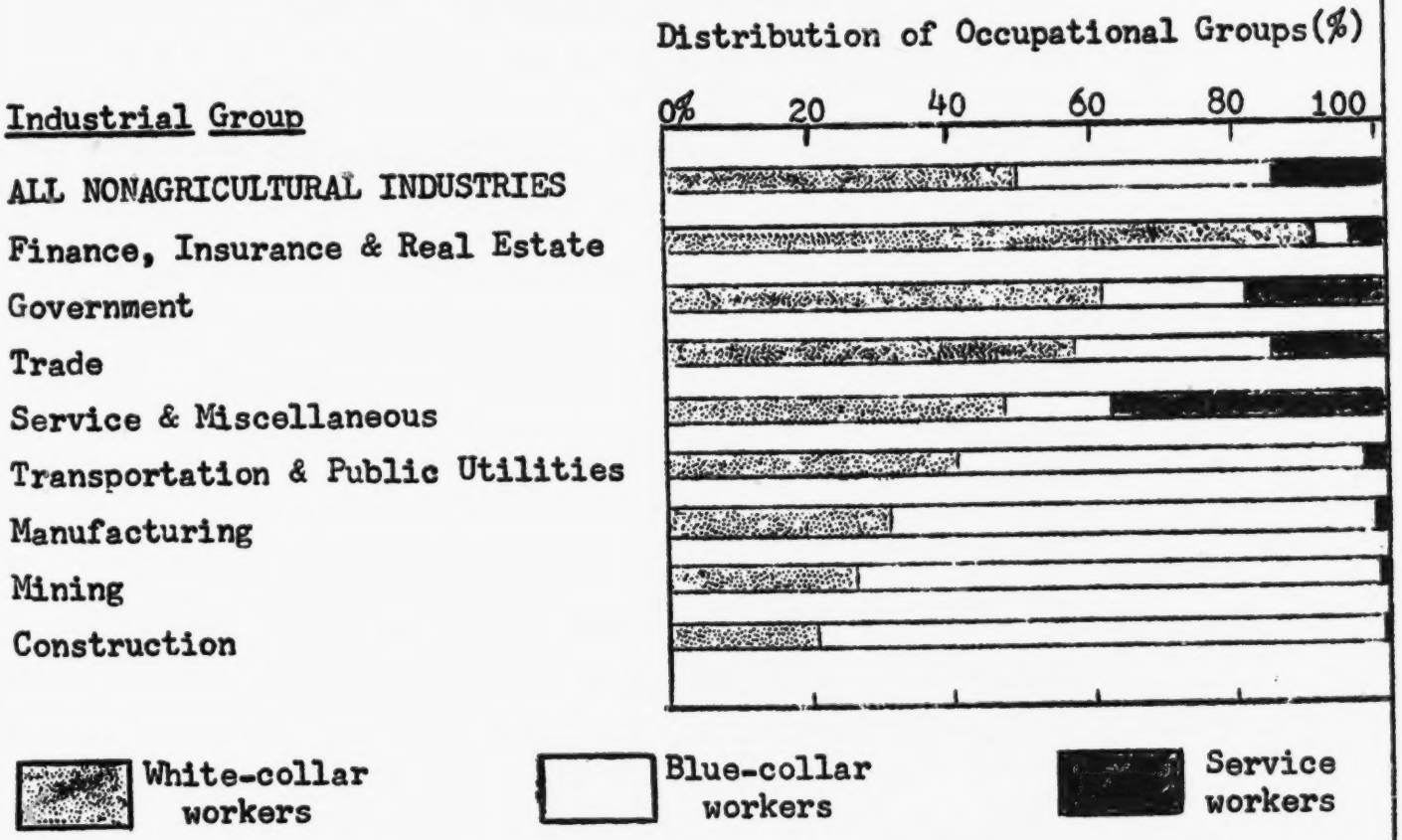
2. The goods-producing industries (remember: agriculture, construction, manufacturing, and mining) employed more workers in 1964 than the service-producing industries. True_____ False_____.

3. More workers in 1964 were employed by the federal government than state and local governments. True_____ False_____.

* * *

Chart III presents the industrial sources of white-collar, blue-collar, and service employment. It shows the percentage of employees that each of the three occupational groups accounts for in nonagricultural industries. For example, nearly 50% of all workers employed in nonagricultural industries were white-collar employees. However, the proportion of white-collar employment varies a great deal among the particular nonagricultural industries. (In construction, white-collar workers account for only about 20% of the total employment in that industry. However, in finance, insurance, and real estate almost 90% of the work force consists of white-collar employees.)

Chart III. PROPORTION OF WHITE-COLLAR, BLUE-COLLAR, AND SERVICE WORKERS IN NONAGRICULTURAL INDUSTRY GROUPS, 1964




SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 16.

III-1. In 1964, in what industries were 50% or more of the employees White-collar workers?

III-2. What three industries employed 18% or more Service Workers in their operations?

III-3. Blue-collar workers make up the majority of employees in what four industries?

III-4. What is the relationship between occupational and industrial employment opportunities? (Hint: Do opportunities for Service Workers look better in some industries than others?)

* * *

Let's see if we can summarize what we have learned about jobs and employment in our economy. We have seen that the thousands of different jobs that workers have in our economy can be analyzed by using occupational and industrial classification systems. These two classification systems make use of categories of jobs and categories of industries. For example, all the occupations in the "white-collar" occupational category share certain common characteristics, just as do the industries in the "goods-producing" industrial category. "Professional and technical" occupations have a number of important similarities as do the industries in the "manufacturing" industrial classification.

Using the occupational classification system, we found that in 1965 about 44% of our workers were employed in White-collar occupations while the remainder were employed as follows: Blue-collar, 37%; Service, 13%; and Farm, 6%. A more detailed examination of occupational employment in 1965 shows the following distribution: Semiskilled or operative workers, 19%; Clerical, 16%; Service, 13%; Skilled craftsmen and foremen, 13%; Professional and technical, 12%; Managers, owners, and officials, 10%; Sales, 6%; Farmers and farm managers, laborers, and foremen, 6%; and Unskilled laborers, 5%.

* * *

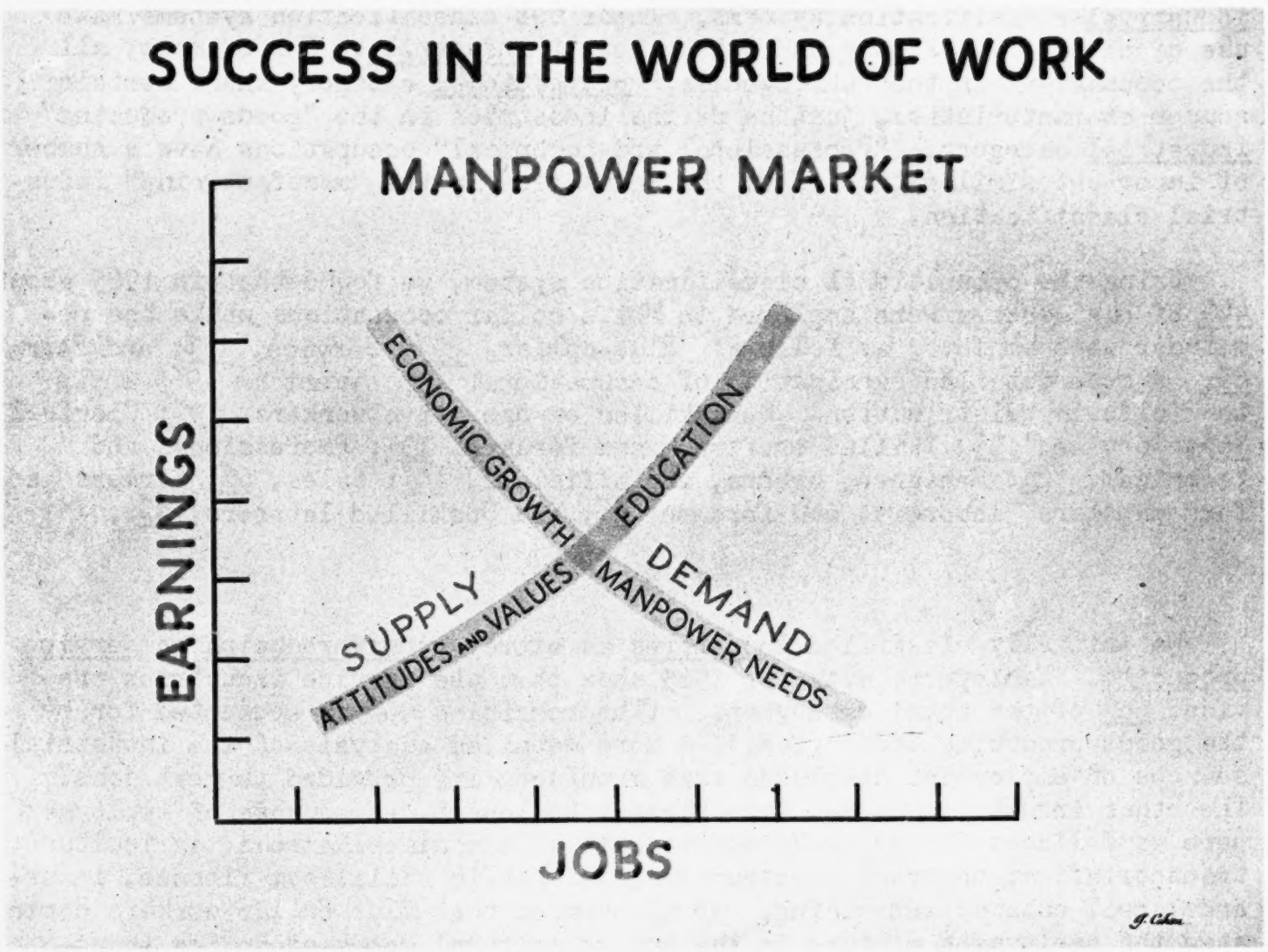
We initially classified industries as either goods-producing or service-producing. Employment data for 1965 show that the service industries provided 60% of the total employment. (The remaining 40% is accounted for by the goods-producing industries.) A more detailed analysis of the industrial sources of employment disclosed that manufacturing provided the most jobs. The other industries ranked from highest to lowest, as sources of employment, were as follows: trade; government; service and miscellaneous; agriculture; transportation; contract construction; and public utilities; finance, insurance, real estate; and mining. We also found that Blue-collar workers dominated the employment picture in the nonagricultural goods-producing industries. The White-collar occupations are prominent in the employment situation in the service-producing industries.

* * * * * * * * * *

## Today's Lesson in Brief

The millions of workers in our economy are employed in several thousand occupations on many different types of industries. Occupational and industrial concepts have been developed by the U. S. Department of Labor to identify the workers' jobs. By using these concepts we can classify and record the changing employment situation in the manpower market. Nearly half of our employed labor force works in White-collar occupations. Blue-collar workers account for about one-third of total employment. One-sixth of our work force is employed as Service workers; and Farm workers represent one-thirteenth of total employment. Six out of every ten employed workers in the economy are found in the service-producing industries, which are the primary source of white-collar employment. The goods-producing industries -- which are the source of employment for the balance of the workers -- provide the majority of job opportunities for blue-collar workers.

# SUCCESS IN THE WORLD OF WORK




When men and women enter the manpower market, they want meaningful jobs with high pay and opportunities for advancement. However, in order for the manpower market to provide these jobs, there must be a smooth meshing of both demand and supply forces. The economy must be growing rapidly enough to provide job opportunities for everyone in the labor force. Workers must develop skills and attitudes that meet the demands of a dynamic industrial system. Jobs and workers must be brought together with a minimum of friction and waste through improved information, mobility, and employment practices. An effective manpower market can provide for the fullest and most efficient use of the nation's human resources.

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## "... But Woman's Work Is Never Done"

Women do much of the work in our society. Not only are they responsible for day-to-day management of the great majority of American homes and caring for their families, but millions of women are also entering the manpower market and accepting employment outside the home. Women are playing an ever greater role in producing the goods and services for sale in the market and helping provide us with a higher standard of living. (Almost every American woman is employed at sometime in her life.) A brief overview of the "revolution" which is taking place in the working lives of women will help not only the girls -- but the boys as well -- understand how the work-role of women is changing and the effects of these changes on our personal, social, and economic lives.

* * * * * * * * * *

What kinds of work do women perform in the United States? There are 48 million families in America: women do most of the family household work. In about 60% of families, women also have responsibilities for taking care of one or more children. In 5 million families, the woman is also the head of the household.

> "WORK DONE BY AMERICAN HOUSEWIFE WORTH $5,700"
>
> "Work done by the average American housewife is valued at $5,700 a year, according to a report issued this week by research economists. Estimates were based on hourly wages paid for house-cleaning, cooking, child-care, and related services to women employed as personal household workers."

Question: What is the total economic value of all housework done by the millions of American housewives? Do we include the value of these services in measuring our Gross Naticnal Product?

* * *

But this is not the only work that women do in America. Table I shows, for example, that in 1965, nearly 8 million women held jobs as clerical workers. Nearly 2 million women were employed as sales workers. More than a third of the 9 million professional and technical workers employed in our economy were women.

Table I. MAJOR OCCUPATIONAL GROUPS OF EMPLOYED WOMEN, 1950 AND 1965*

| Major Occupational Group | Number (in thousands) | | % Distribution of All Women Employed | | Women as % of Total Employment** | |
|---|---|---|---|---|---|---|
| | 1965 | 1950 | 1965 | 1950 | 1965 | 1950 |
| Professional & technical workers | 3,323 | 1,862 | 14% | 11% | 37% | 42% |
| Managers, officials, & owners (except farm) | 1,106 | 941 | 5 | 5 | 15 | 15 |
| Clerical workers | 7,756 | 4,539 | 32 | 26 | 70 | 59 |
| Sales workers | 1,881 | 1,516 | 8 | 9 | 41 | 39 |
| Craftsmen & foremen | 281 | 181 | 1 | 1 | 3 | 2 |
| Operatives | 3,656 | 3,215 | 15 | 19 | 28 | 27 |
| Laborers (except farm and mine) | 116 | 68 | 1 | 1 | 3 | 2 |
| Private-household workers | 2,025 | 1,771 | 8 | 10 | 98 | 92 |
| Service workers (except private-household) | 3,829 | 2,168 | 15 | 13 | 55 | 45 |
| Farmers & farm managers | 140 | 253 | 1 | 2 | 6 | 6 |
| Farm laborers & foremen | 534 | 663 | 2 | 4 | 33 | 27 |
| TOTAL, ALL GROUPS | 24,648 | 17,176 | 100% | 100% | 35% | 29% |

*Women 14 years of age and over.
**Both men and women.
Totals may not equal 100% because of rounding.
SOURCE: U. S. Department of Labor, Women's Bureau, 1965 Handbook of Women Workers, p. 89.

Questions:

T-1. In which three occupational groups did women represent over 50% of the total employment in 1965?

T-2. About 1 out of every 3 workers employed in the United States in 1965 was a woman? Please check the correct answer. True_____ False_____.

T-3. This proportion (1 woman cut of every 3 workers) was higher in 1965 than in 1950. True_____ False_____.

T-4. What is the significance of 37% which is boxed?

T-5. In what types of jobs are women currently employed? Are they predominantely blue-collar workers? Unskilled workers?

T-6. In general, how well paid do you suppose women are relative to men? Please check the correct answer. Better_____ The same_____ Worse_____.

T-7. In 1965, men made up what percentage of the total number of people employed in clerical work?

* * *

Let's turn from the present to the future by examining data published by the U. S. Department of Labor concerning the life and employment patterns of women of tomorrow. Most girls in the United States can expect the following life pattern as they move from school through middle age to the later years of life:

Unless they go to college, the majority of unmarried girls will go to work at age 17 or 18 after leaving school. Within three or four years, a large number of these young women will marry. Some of them will stop working for pay in order to get a new home organized, but a majority will continue to work to make it possible for a husband to get through school or to permit purchase of such things as a car, a home, or labor-saving equipment. Then when the first baby arrives, the vast majority of young mothers give up their jobs and remain out of the manpower market until their youngest child is old enough to go to school. (About one in five women with preschool children will continue to work, usually because of economic need, but the general pattern will be that the age group 25-34 will provide the smallest share of women workers.)

When the youngest child no longer needs constant care, many mothers will choose to return to paid employment. This will usually happen when the women approach their middle 30's, after they have been out of the work force for about eight or ten years. Once back, the tendency will be for them to remain in the labor force, perhaps not continuously, but certainly for a great share of their years to age 65. By 1975 nearly half of all women between 35 and 65 will probably be either working or looking for work. Unless things change radically and unexpectedly in the years ahead, more women age 45 to 54 will be active in the labor force than any other age group.

For the one girl in 20 who remains single, the length of her working life will differ little from that of a man. Since most single women must support themselves, and often parents or other relatives as well, they must continue to hold a job.

To summarize, the "work-life expectancy" as it is often called, for the women of tomorrow will be: for single women, about 40 years, for childless married women, about 30 years; and for married women with children, about 15 to 25 years, depending on the number of children.

* * *

Discussion Questions

Girls: What do you think are some of the educational, social, and economic implications for you of this look at your future? Do you like what you read about your future?

Boys: Does this portrait of the "new American woman" appeal to you? Why or why not? What do you think is good or bad about the changing employment patterns of women?

* * *

Item #1 "WOMEN WORK AS CONSTRUCTION LABORERS"

"Women are employed as highway laborers to place and tie together steel reinforcing rods in concrete paving. They are paid the same hourly wage as men, under rules established by the government."

Item #2 "WOMEN HOLD TOP PROFESSIONAL JOBS"

"Statistics released by the government indicate that 74% of all the nation's medical doctors and 60% of its economists are women. Nearly one-third of the engineers are women."

Questions: Do you think that item #1 refers to women in the U. S.? What country is referred to in item #2? What do these reports suggest to you regarding employment opportunities for women?

* * *

We have seen that American women do provide "womanpower" that helps get much of the work done in our economy. This conclusion is supported by data from the U. S. Department of Labor which shows that out of every 100 women (14 years of age or over) in the United States in 1962 --

52 were working exclusively in keeping house,
35 were employed outside the home,
9 were going to school,
2 were unemployed,
1 was unable to work, and
1 was in an "other" category.

* * * * * * * * *

## Today's Lesson in Brief

By examining the data in this lesson, we have found that there is a great deal of truth in the saying that "woman's work is never done." Women work in the homes, factories, offices, laboratories, and classrooms of our society. Women are providing an increasing share of the human resources that are the key to our economic productiveness. In fact, nine out of every ten girls today will be gainfully employed at some time in their lives.

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## Work and Mental Health

Mental health is important to workers, their families, and their communities. What is meant by mental health? How does a person's job affect his mental health? What problems are created for workers in today's industrial society? This discussion of work and mental health should be interesting and useful to you since good health -- both physical and mental -- ranks high as a life goal for every American.

* * * * * * * * * *

Good mental health requires a realistic belief in ourselves and what we're doing--a feeling that our life has meaning and purpose. It is <u>accepting</u> ourselves, with our limitations, and trying to approach our problems and solve them as best we can.

We are mentally healthy when we have the ability to handle our emotions and our problems. Having the ability to deal with reality, we know that all people have ups and downs, the "blues", moments when they want to strike out at others, or times when they may feel unwanted and lonely. The difference between the mentally healthy and unhealthy person is that the healthy person can usually snap out of periods of "blues" and frustration quickly without special help or treatment.

Two of the signs of good mental health are having the capacity to adapt to change and to direct your hostile energy into creative and constructive outlets. The state of our mental health depends on our total personality and total environment.

<u>Question</u>: What are the conditions, activities, and situations that you think promote good mental health? (cause poor mental health?)

* * *

Let's consider how certain aspects of a job and the work situation can affect our mental health. The information in the following table will suggest to you some ideas about how <u>skills</u> and <u>age</u> might influence the mental health of workers. It shows, for example, that over half (58%) of young <u>skilled</u> workers have good mental health, while only one out of 10 (10%) young workers doing repetitive, semi-skilled jobs was judged by psychologists to have good mental health.

Table I. MENTAL HEALTH OF FACTORY WORKERS, BY SKILL LEVEL AND AGE

| Skill Level | Young Workers with Good Mental Health (percent) | Middle-Aged Workers with Good Mental Health (percent) |
|---|---|---|
| Skilled Workers | 58% | 56% |
| High Semi-skilled | | 41 |
| Ordinary Semi-skilled | 35 | 38 |
| Repetitive Semi-skilled* | 10 | 26 |

Note: This study was based on men working in automotive companies.
*Pace of these jobs is closely tied to the demands made by machines.
SOURCE: A. Kornhauser, Mental Health of the Industrial Worker, A Detroit Study, 1965, p. 85.

Question: What general conclusions can you draw from the data in Table I concerning the relationship between skill level and mental health? Do these conclusions apply equally to both age groups?

* * *

Studies done by psychologists have shown that the mental health of workers is better if their job provides opportunities for satisfying the following needs:

-- using their abilities,
-- feeling that they are performing worthwhile functions,
-- finding interest in their work,
-- feeling they are competent human beings, and
-- gaining a sense of accomplishment and self-respect.

In other words, workers will have better mental health if their various needs are satisfied by their jobs.

Question: What aspects of a job or work place might make it difficult for a worker to get his needs satisfied? What type of work might cause you to "flip your lid"?

* * *

What problems are created for workers by the conditions of our industrial society? Let's read the following case to see what kinds of problems workers have and how these work-related problems affect their lives.

CASE #1 "Harold the Hung-up Worker"

"Upon graduation from high school, Harold was employed by the ABC Company as a general clerical worker in the office. During the next five years he did satisfactory work, and at the end of that time was promoted to the position of bookkeeper. Shortly after beginning work as a bookkeeper in the accounting department, he got married. Within the next few years Harold's family responsibilities increased until his salary was no longer enough to maintain the standard of living that he and his wife wanted. Harold requested an increase in salary from his supervisor in the department and was told that he was receiving as much as a bookkeeper was worth. The head of the department told Harold that the only way he could hope to receive an increase in salary was to qualify himself for a higher-rated job. He advised Harold to enroll in an accounting course in the local night school.

"Harold had no formal training since high school, where his academic work had been only average. However, he did enroll for the course in accounting. But within a few months he began to have trouble with his school work. His behavior in the office and at home became noticeably different. At the office he talked loudly and long to his fellow workers on the subject of how the accountants deliberately made work difficult for the bookkeepers by insisting upon 'standard accounting procedures'. At home, Harold's behavior also changed. Whereas he had formerly taken considerable interest in his family and enjoyed being with them, he now became unfriendly toward his family and spent much of his spare time away from home.

"Instead of working on his lessons for night school, Harold began spending more and more time hanging around a local beer joint, drinking and thinking of various schemes to get a job in which he would make a great deal of money. However, he made no effort to carry through on any of these plans."

Questions: What are some of Harold's problems, and how might they be solved? What are some other mental health problems that workers face on the job? If Harold lived in your town, where could he go to get assistance in dealing with his mental health problems?

* * * * * * * * * *

Today's Lesson in Brief

Good mental health is an important goal for everyone in our society. Studies by psychologists and sociologists show that a worker's mental health is influenced by his job and work situation. Just as workers enjoy better physical health when they have proper ventilation, heating, lighting, and safety standards on the job, they also will enjoy better mental health when the job provides them with opportunities to satisfy their needs for interesting and worthwhile work activity.

# PLANNING AND RATIONAL DECISION-MAKING

5. SELECT BEST SOLUTION IN TERMS OF GOALS
4. ANALYZE THE CONSEQUENCES
3. CONSIDER ALTERNATIVES
2. IDENTIFY GOALS
1. DEFINE THE PROBLEM
STEPS in ECONOMIC DECISION-MAKING

How could Harold (the worker with mental health problems, in Case #1) have used the steps in economic reasoning? Give some specific examples from the case to illustrate the five steps.

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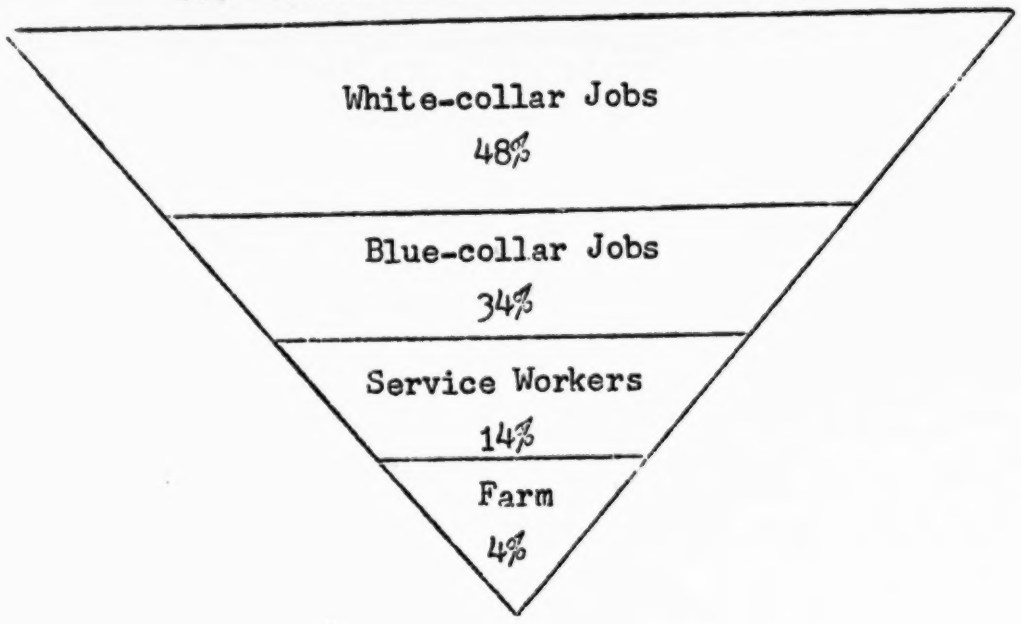
## Occupational Needs in the 1970's

THE PYRAMID OF EMPLOYMENT FOR 1975




We are becoming increasingly a nation of White-collar and Service workers. Blue-collar employment is growing very slowly, and the number of farm jobs actually is declining. This shifting pattern of employment suggests that job opportunities in the future will be different from those of the past. But what do you know about the details of the manpower market <u>you</u> will be entering in the 1970's after you have finished school? For example, do you know which occupations and which occupational groups will provide the most jobs and show the greatest increase in employment within the next decade? These are the questions which this lesson will consider. The answers to these questions will be of assistance to you in planning your future in the manpower market. The more you know about the future of employment in our economy, the more likely you are to make intelligent decisions in the manpower market.

* * * * * * * * * *

Soon you will be thinking about your entry into the manpower market of the 1970's. An understanding of the kinds of jobs there will be in the 1970's and the occupational changes that will take place between now and then will be helpful to you in your planning. Where can we find employment information of this type? We can turn to the Bureau of Labor Statistics (BLS), which is part of the United States Department of Labor. This agency has prepared employment <u>projections</u> for 1975 which can assist us in looking at the manpower market of the 1970's. From these employment projections you can get some idea of which <u>occupations</u> and which <u>industries</u> will offer the best job opportunities in the 1970's.

Let's take a look at a table, which shows present and future employment by occupation in the United States.

Table I. U.S. EMPLOYMENT BY OCCUPATION, 1964 AND PROJECTED 1975

| Occupational Group | Actual 1964 Employment | | Projected 1975 Employment | | Percent Change, 1964-75 |
|---|---|---|---|---|---|
| | Number (Thousands) | Percent | Number (Thousands) | Percent | Percent (%) |
| White-collar workers: | 31,125* | 44.2% | 42,800 | 48.3% | + 38% |
| Professional & technical | 8,550 | 12.2 | 13,200 | 14.9 | + 54 |
| Managers, officials, & owners | 7,452 | 10.2 | 9,200 | 10.4 | + 23 |
| Clerical workers | 10,667 | 15.2 | 14,600 | 16.5 | + 37 |
| Sales workers | 4,456 | 6.3 | 5,800 | 6.5 | + 30 |
| Blue-collar workers: | 25,534 | 36.3 | 29,900 | 33.7 | + 17 |
| Craftsmen & foremen | 8,986 | 12.8 | 11,400 | 12.8 | + 27 |
| Operatives | 12,924 | 18.4 | 14,800 | 16.7 | + 15 |
| Nonfarm laborers | 3,624 | 5.2 | 3,700 | 4.2 | + 3 |
| Service workers | 9,256 | 13.2 | 12,500 | 14.1 | + 35 |
| Farm workers | 4,444 | 6.3 | 3,500 | 3.9 | - 21 |
| TOTAL, All Groups | 70,357 | 100.0% | 88,700 | 100.0% | + 26 |

NOTE: Percentages do not add to 100 because of rounding.
*To be read as 31,125,000 (31 million, 125 thousand)
SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, America's Industrial and Occupational Manpower Requirements, 1964-75, January 1, 1966, p. 128.

Table I indicates, for example, that there were 12,924,000 operatives employed in 1964. Operative workers accounted for 18.4% of all employed workers in 1964. By 1975, BLS estimates that there will be 14.8 million operatives employed who will account for 16.7% of the total number of workers employed in that year. The number of operatives employed will increase 15% between 1964 and 1975. This amount of increase in employment is less than

the average -- 26% -- for the 1964-1975 period. We can see that though the number of operatives employed will increase by 1,876,000 (the difference between 12,924,000 and 14,800,000) between 1964 and 1975, their share of total employment will decrease by 1.7% (the difference between 18.4% to 16.7%). Thus, while operative employment will be greater in <u>numbers</u> in 1975, it will be <u>relatively</u> less significant as a source of jobs.

<u>Questions</u>

Using the data in the Table, please check the correct answer.

T-1a. Blue-collar employment will increase at a greater rate than white-collar employment during the period 1964-1975. True_____ False_____.

T-1b. Farm workers will actually decrease in absolute numbers between 1964-1975. True_____ False_____.

T-1c. Laborers will be a smaller share of the total number of employed workers in 1975 than they were in 1964. True_____ False_____.

T-1d. Professional and technical workers will have the greatest relative increase in employment during the period 1964-1975. True_____ False_____.

T-1e. Blue-collar workers will account for about one-third of all employed workers in 1975. True_____ False_____.

T-2. Which <u>three</u> of the occupational groups will show the <u>slowest</u> rate of growth in employment between 1964-1975?

T-3. What conclusions about occupational opportunities for the 1970's do you draw from the data in the Table?

* * *

Let's add a word or two of caution about our picture of employment in the 1970's. Reference has been made in this lesson, and will be in other lessons, to the employment projections for 1975 made by the U. S. Bureau of Labor Statistics. It would be well to point out that the crystal ball can get cloudy, even for BLS experts. Their estimate of what things will be like 10 years in the future depends on certain assumptions. One of the assumptions involved in all the projections mentioned in this lesson is that in 1975 the rate of unemployment in the labor force will be 3%. In view of the high unemployment rates of the 1950's and 1960's, this is a very optimistic assumption. Morever, assumptions have to be made about the rate of technological change between now and 1975. This involves a certain amount of guesswork. The Bureau's experts provide the very best estimates possible, but they are still guesses. And the Bureau can be mistaken about 1975, just as it was mistaken some years ago about the number of employed workers in 1965.

* * * * * * * * * *

## Today's Lesson in Brief

The manpower market of the 1970's will have a white-collar. White-collar and service occupations will have the fastest rate of growth in employment in the decade from the middle 1960's to the middle 1970's. Employment in blue-collar occupations, while growing in number, will nevertheless represent a smaller share of the total employment picture in the 1970's than now. The number of farm workers will continue to decline. This projection of a continuing shift in the occupational basis of employment in our economy has important implications for your career planning.

PROJECTED EMPLOYMENT GROWTH BY OCCUPATION, 1964-1975

| Decline | MAJOR OCCUPATIONAL GROUP | PROJECTED EMPLOYMENT GROWTH: No Change | Less Than Average | Average | More Than Average |
|---|---|---|---|---|---|
| | Professional and technical workers | | | | → |
| | Service workers | | | | → |
| | Clerical workers | | | | → |
| | Craftsmen and foremen (Skilled workers) | | | → | |
| | Managers, officials, and owners | | | → | |
| | Sales workers | | | → | |
| | Operatives (Semiskilled workers) | | → | | |
| | Laborers, nonfarm (Unskilled workers) | → | | | |
| ← | Farm workers | | | | |

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 16.

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/08/#43

## Will It Take A Good Education to Get Tomorrow's Jobs?

**The men and women in our labor force increasingly are better educated. Today, the average (median) worker in our economy is a high school graduate. The increase that has been taking place in the years of schooling completed by our labor force will continue. Employment experts have suggested that "to enter the job market without at least a high school diploma is now economic suicide."**

* * * * * * * * * *

You can answer the question of whether it will take a good education to get tomorrow's jobs by using some of the tools of economic analysis you learned about earlier in the course. You will recall when we talked about supply and demand in the manpower market that the education of workers was one of the factors affecting the supply of workers. And "manpower requirements" -- the need for people with certain skills -- was one of the factors affecting the demand for workers. Therefore, if we look at both the supply of and demand for workers in the manpower market, we should be able to give an answer to the question posed at the beginning of the lesson.

In our introduction to the manpower market, we noted that the labor force was the "pool" or supply from which employers could draw workers. Let's look at Table I on the next page to see the amount of schooling that the labor force has now and is likely to have in the future (in 1975). You can see, for example, that the number of high school graduates in the civilian labor force will increase by 12% during the period 1964 to 1975, and the number of college graduates will increase by 18%.

Table I. YEARS OF SCHOOL COMPLETED BY CIVILIAN LABOR FORCE*

| Years of School Completed | March 1964 (percentage distribution) | Projected 1975 (percentage distribution) |
|---|---|---|
| ELEMENTARY: | | |
| Less than 5 years | 4.2% | 2.6% |
| 5 to 7 years | 9.1 | 6.6 |
| 8 years | 14.0 | 8.8 |
| HIGH SCHOOL: | | |
| 1 to 3 years | 18.9% | 20.5% |
| 4 years | 32.0 | 35.8 |
| COLLEGE: | | |
| 1 to 3 years | 9.7% | 11.4% |
| 4 years or more | 12.1 | 14.3 |
| TOTAL LABOR FORCE | 100.0% | 100.0% |
| TOTAL: | | |
| Less than 4 years of high school | 46.2% | 38.5% |
| 4 years high school or more | 53.8 | 61.5 |

*Men and women 25 years and over. NOTE: Of all the people in the labor force in 1964, 4.2% had less than five years of schooling; 32.0% had finished four years of high school; etc.
SOURCE: Manpower Report of the President 1965, p. 51.

Look at the statistics in Table I and then answer the following questions:

I-1. In your opinion, do we have a well-educated group of workers in today's economy? Yes ___ No ___.

I-2. How would you rate the level of schooling completed by your potential rivals for the jobs of 1975?
Good ___ Fair ___ Poor ___.

I-3. What conclusion do you draw from the figure 61.5%, which is boxed?

I-4. Will post-high school training become more popular, or less?
More ___ Less ___.

* * *

We have looked at the education of the potential supply of workers for 1975. Now let's turn to the demand for workers during the decade of 1965-1975. By examining the amount of schooling that different occupational groups have today, and the relative increase in demand for workers in these occupations, we can gain some insight into the relationship between education and employment opportunities. Table II shows the relationship between schooling and growth in employment opportunities.

Table II. YEARS OF SCHOOLING AND ANTICIPATED GROWTH IN EMPLOYMENT

| Occupational Group | Average Number of Years of Schooling Completed in 1965* | Rank by Number of of Years of Schooling Completed | Rank by Percentage Increase in Projected Employment 1965-1975 |
|---|---|---|---|
| Professional & technical | 16.3 | 1 | 1 |
| Managers, officials, and owners | 12.6 | 2 | 4 |
| Clerical Workers | 12.5 | 3-4 | 3 |
| Sales Workers | 12.5 | 3-4 | 6 |
| Craftsmen & foremen(Skilled) | 11.7 | 5 | 5 |
| Operatives (Semiskilled) | 10.6 | 6 | 7 |
| Service workers | 10.1 | 7 | 2 |
| Laborers (Unskilled) | 9.5 | 8 | 8 |
| Farmers & farm workers | 8.6 | 9 | 9 |

*Average here is the median, which is the middle number in a distribution of numbers ranging from the highest to the lowest. Half the people have more than the median number of years of schooling and half the people have less.

SOURCE: D. Johnston & H. Hamel, "Educational Attainment of Workers in March 1965," Special Labor Force Report No. 65, U. S. Department of Labor, Bureau of Labor Statistics, pp. 4-13, U. S. President & U. S. Department of Labor, Manpower Report of the President 1967, p. 274.

Questions from Table II:

II-1. Does this table suggest to you that the occupations which are growing the fastest in employment opportunities are the same ones that require the most education? Yes ___ No ___.

II-2. How do you explain the high increase of jobs for service workers, even though they rank among the lowest in average years of schooling completed?

II-3. What does this table not tell you about employment opportunities in 1965-1975?

* * *

We can gain some insight into the relationship between education and employment by looking at what happens to men and women in our labor force who do not have the same "credentials" (a high school diploma) as the majority of American workers. Table III shows the employment situation faced by high school dropouts and compares it with high school graduates. The statistics show, for example, that 28.2% of high school graduates are white-collar workers, while only 11.4% of the dropouts have white-collar jobs.

Table III. OCCUPATIONAL EMPLOYMENT OF HIGH SCHOOL GRADUATES AND DROPOUTS IN 1965*

| Occupational Group | Dropouts | Graduates |
|---|---|---|
| WHITE-COLLAR WORKERS: | 11.4% | 28.2% |
| Professional, technical managers, officials, and owners | 3.9 | 9.8 |
| Clerical | 4.5 | 13.5 |
| Sales | 3.0 | 4.9 |
| BLUE-COLLAR WORKERS: | 74.2% | 59.3% |
| Craftsmen and foremen | 23.2 | 20.0 |
| Operatives | 34.0 | 28.9 |
| Laborers | 17.0 | 10.4 |
| SERVICE WORKERS | 6.8% | 6.2% |
| FARMERS & FARM WORKERS | 7.7% | 6.4% |
| ALL WORKERS | 100.0% | 100.0% |

NOTE: Because of rounding, sums of individual items may not equal totals.

*Based on sample of 2.4 million men ages 16-21. The term "dropout" refers to men who left school before graduating from high school; the term "graduates" refers to men who graduated from high school, and includes men who had spent time in college but were not college graduates.

SOURCE: V. Perrella, "What Happens to School Dropouts?" Occupational Outlook Quarterly, February 1967, p. 7.

Questions from Table III:

III-1. What is the penalty in terms of employment, that the dropouts pay for not graduating from high school?

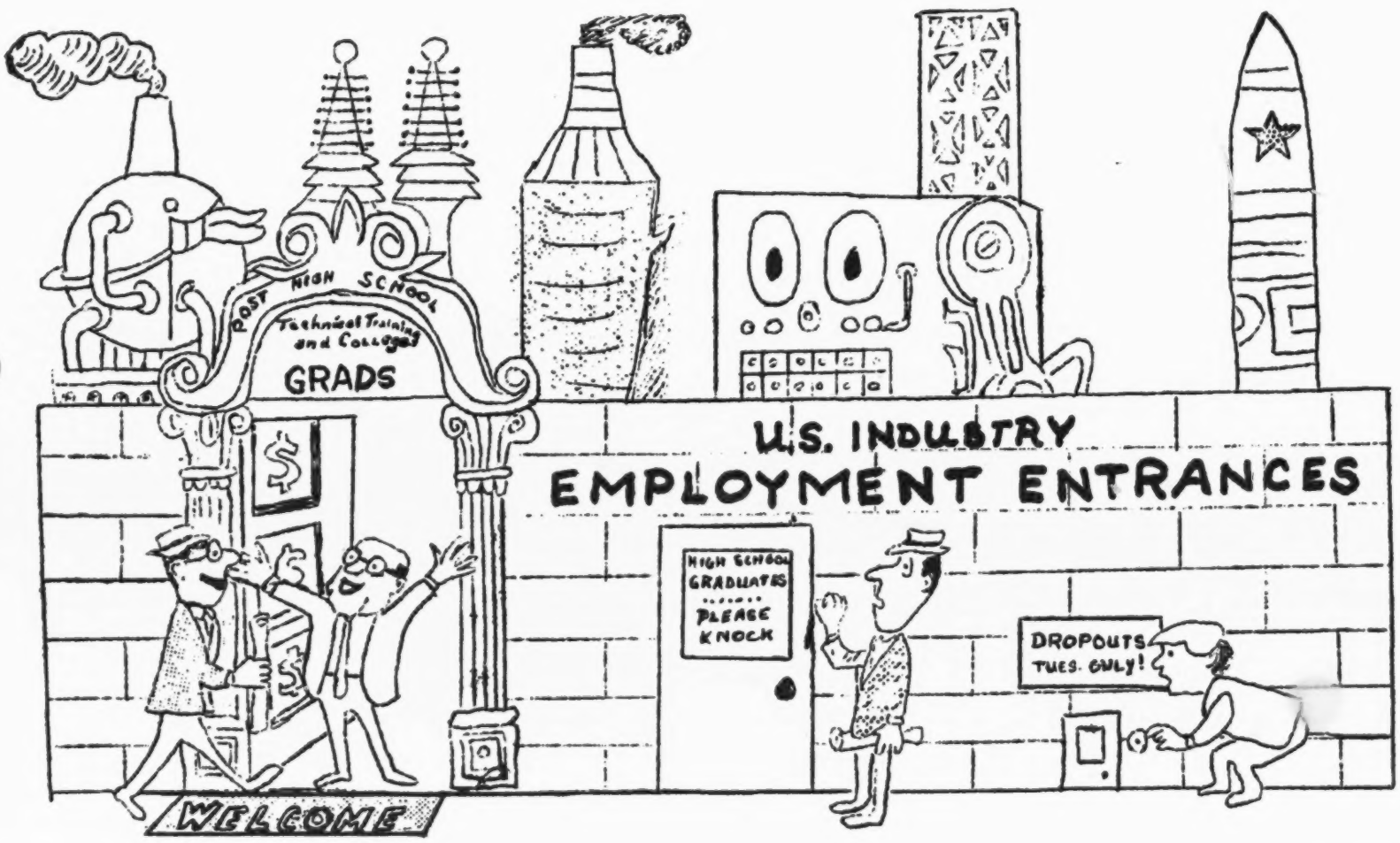
III-2. Is it true that "to enter the job market without at least a high school diploma is now economic suicide"?

* * *

You have seen that over 60% of the men and women in the labor force in 1975 will be high school graduates. These are the people you will be competing against for jobs. It has also been shown that the jobs that are growing fastest are generally those requiring the most education. The relative demand for workers for tomorrow's jobs in almost every case will be greatest for those occupations where high school graduation is already the norm.

To drop out of school before you complete high school is to limit seriously your employment opportunities. The facts on dropouts show that the chances of being employed in professional, technical, or managerial jobs are <u>two and a half times as great</u> for high school graduates as for dropouts. Only about one out of every nine dropouts is a white-collar worker while better than one out of every four high school graduates is employed in white-collar work.

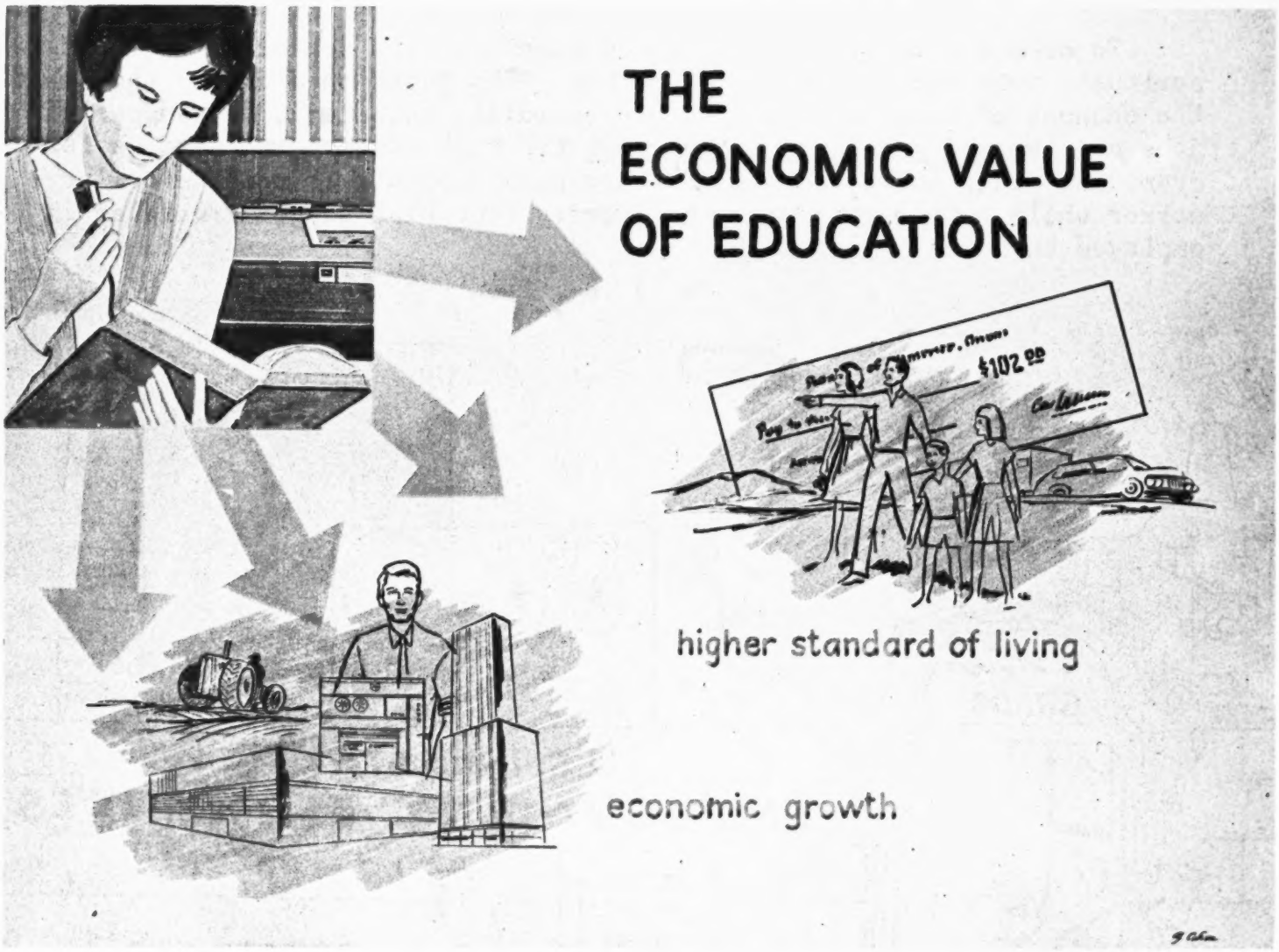
* * *




* * * * * * * * * *

<u>Today's Lesson in Brief</u>

Data have been presented showing that American workers have a great deal of schooling and that the amount of education that they will have in the future is even greater. While it may not be exactly "economic suicide" to enter the manpower market without a high school diploma -- it is a serious handicap. It will take at least a high school diploma to get <u>most</u> of tomorrow's jobs.




The economic value of your education -- both to yourself and society -- will depend upon whether you are employed and what type of job you have. The amount and type of your education will largely determine your qualifications for employment.

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## Employment by Industry: Projections for 1975

Job opportunities in the future will be different from those of the past, in part because the INDUSTRIAL composition of employment in our economy is changing. What are the details of these changes? Do you know what industries workers will be employed in and what kinds of goods and services they will be producing in the 1970's? How many workers will be employed in the 1970's in each of the industrial groups? Which groups will show the greatest growth in employment? Just as it was useful to learn which occupational groups will show the most growth in the years ahead, knowledge of employment by industrial groups will also help you in planning for successful participation in the manpower market.

* * * * * * * * *

An understanding of the changing industrial sources of employment can be very valuable to you in planning your career. (In what industries will jobs be available?) Information on the industrial basis of employment, now and in the future, is provided by the Bureau of Labor Statistics (in the U.S. Department of Labor). BLS has prepared industrial, as well as occupational, employment projections for 1975. These projections can give us some idea of which industries will offer the best job opportunities in the 1970's.

Let's take a look at some figures showing the industrial sources of jobs in the 1970's. Table I presents the actual employment by industrial group for the United States in 1964 and projected employment by industry for 1975. For example, the table indicates that 4,761,000 workers were employed in the agriculture industry in 1964. These agricultural workers represented 7.6% of total employment for 1964. By 1975 the Labor Department estimates that there will be only 3.7 million agriculture workers, accounting for only 4.7% of total employment in that year. Thus, Chart I shows that between 1964 and 1975 employment will actually decrease 21% in the agricultural industry.

Table I. U. S. EMPLOYMENT OF WAGE AND SALARY WORKERS, BY INDUSTRY, 1964 AND PROJECTED, 1975
(Numbers in thousands)

| Industrial Group | 1964 Employment Number | 1964 Employment Percent | Projected 1975 Employment Number | Projected 1975 Employment Percent | Percent Change 1964-1975 |
|---|---|---|---|---|---|
| Agriculture | 4,761 | 7.6% | 3,745 | 4.7% | -21% |
| Mining | 633 | 1.0 | 620 | .8 | - 2 |
| Contract construction | 3,056 | 4.9 | 4,190 | 5.3 | +37 |
| Manufacturing | 17,259 | 27.4 | 19,740 | 24.8 | +14 |
| Durable goods | 9,813 | 16.0 | 11,500 | 14.4 | +17 |
| Nondurable goods | 7,446 | 11.4 | 8,240 | 10.4 | +11 |
| Transportation and public utilities | 3,947 | 6.3 | 4,425 | 5.6 | +12 |
| Trade, wholesale and retail | 12,132 | 19.3 | 16,150 | 20.3 | +33 |
| Finance, insurance, and real estate | 2,964 | 4.7 | 3,725 | 4.7 | +26 |
| Services and miscellaneous | 8,569 | 13.6 | 12,275 | 15.4 | +43 |
| Total government | 9,595 | 15.3 | 14,750 | 18.5 | +54 |
| Federal government | 2,348 | 3.8 | 2,525 | 3.1 | + 8 |
| State & local govt. | 7,248 | 11.5 | 12,225 | 15.4 | +69 |
| Total All Industries | 62,917 | 100.0 | 79,620 | 100.0 | +27% |

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, America's Industrial and Occupational Manpower Requirements, 1964-1975, January 1, 1966, p. 10.

Questions

T-1. Using the data in Table I, please check the correct answer.

T-1a. Agriculture is the only industry which will show a decline in the number of workers employed between 1964-1975. True_____ False_____.

T-1b. In 1975 almost one-fourth of all workers in the economy will be employed in manufacturing. True_____ False_____.

T-1c. Most of the growth in employment of Government workers between 1964-1975 will be accounted for by the increase in the number of federal government employees. True_____ False_____.

T-1d. Though the number of Transportation and public utilities workers will increase between 1964-1975, their share of total employment will decline. True____ False____.

T-1e. Employment in the Trade industry will grow at a rate between 1964 and 1975 greater than the average. True____ False____.

T-2. In 1975, which three industrial groups will have the greatest number of workers employed?

* * *

One way we can picture the affect that the changing industrial sources of jobs will have on your employment opportunities in the 1970's is to look at the relative rates of employment growth in each of the industry groups. Changes in the industrial basis of employment in our economy between 1964 and 1975 are pictured in Chart I. The projected rates of growth have been classified into five categories: no change, less-than-average, average, more-than-average, and decline. You will recall that Table I showed the average rate of change in employment for all occupational groups between 1964 and 1975 to be 27%. This figure is used as the middle of the "Average" range in Chart I. This chart shows, for example, that three industrial groups -- Government, Services, and Contract construction -- are projected to have a rate of growth in employment between 1964 and 1975 greater than the average for that period. Because these three industrial groups show the greatest increase in employment, they will be good sources of job opportunities in the 1970's.

Chart I. PROJECTED GROWTH IN EMPLOYMENT BY INDUSTRY, 1964-1975

| | | PROJECTED EMPLOYMENT GROWTH | | | |
|---|---|---|---|---|---|
| Decline | INDUSTRY | No Change | Less Than Average | Average | More Than Average |
| | Government | → | → | → | → |
| | Services & misc. | → | → | → | → |
| | Contract Construction | → | → | → | → |
| | Wholesale & Retail Trade | → | → | → | |
| | Finance, Insurance, & Real Estate | → | → | → | |
| | Manufacturing | → | → | | |
| | Transportation & Public Utilities | → | → | | |
| ← | Mining | | | | |
| ← | Agriculture | | | | |

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 13.

Questions from Chart I

C-1. Which two industrial groups will have a decline in their rate of growth in employment during the period 1964-1975?

C-2. Which three industries will have the highest rate of growth in their employment during the period 1964-1975?

C-3. Why do you suppose that the rate of growth in employment during the period 1964-1975 will not be the same for all industries within the service-producing sector? For all goods-producing industries?

* * *

Let's summarize what we have learned today about the projected sources of employment by industry in our economy. We have seen that Mining and especially Agriculture will have less employment. The Government, Services, and Construction industries will have rates of employment growth above average during the period 1964-1975. Finance, insurance, and real estate and the wholesale and retail Trade industries will have average increases in employment to 1975. Below average increases in employment will be made by the Manufacturing and Transportation and public utilities industries. Overall, the service-producing industries -- with the exception of transportation and public utilities -- will have average or above-average employment growth rates between 1964 and 1975. By the 1970's, two out of every three workers will be employed in the service-producing industries. The goods-producing industries, with the exception of contract construction, will have employment growth rates below average. However, we noted that by 1975 one out of every four workers would still be employed in the manufacturing industries.

With the exception of the agriculture and mining industries, additional job opportunities will be available in the 1970's in all the industrial groups. But the number of additional job opportunities will vary among the different industries. A note of advice: remember we learned that certain occupational groups are much more prevalent in some industries than others. This means that the best job opportunities for you in the 1970's will probably be in those industries in which the type of occupation you want enter is most prevalent.

* * * * * * * * *

Today's Lesson in Brief

The sources of employment in 1975, by industry, will be somewhat different from those of the 1960's. We are becoming increasingly a nation of service-producers. By 1975, two out of every three workers in the American economy will be employed in the service-producing industries. However, in 1975 one out of every four workers will still be employed in manufacturing, which is a goods-producing industry. The changing nature of the industrial sources of employment in the 1970's has some important implications for your career planning.

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## Aspiration and Achievement

"Ah, but a man's reach should exceed his grasp,
or what's a heaven for?"

-- Robert Browning

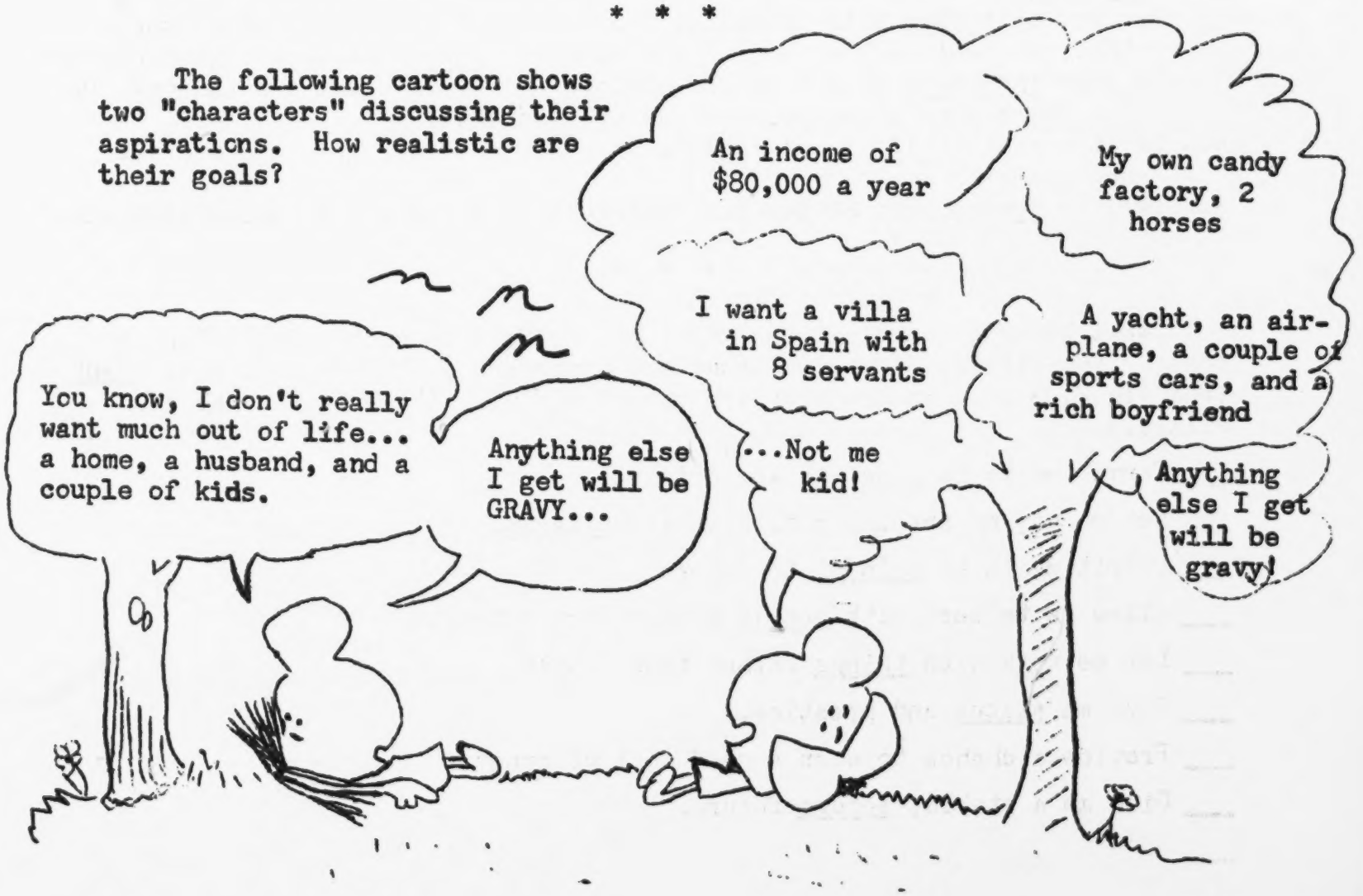
Aspirations are the hopes and dreams that men and women have--the goals we set, what we want from life and what we strive to achieve. What are the forces that determine your goals, and your "aspiration level"? How do aspirations develop, how do they change, and how does your notion of success and failure depend on your values and goals?

* * * * * * * * * *

Aspiration and Achievement are closely tied together; along with Ability and Action, these are the requirements for "success". Today we are going to explore the first A--ASPIRATION, which may be combined with Ability and Action to lead to ACHIEVEMENT. (Remember, Action is always necessary. Aspiration is not just what we say we want to accomplish but also our determination to work toward our goals.)

* * *

The following cartoon shows two "characters" discussing their aspirations. How realistic are their goals?


You know, I don't really want much out of life... a home, a husband, and a couple of kids.
Anything else I get will be GRAVY...
An income of $80,000 a year
I want a villa in Spain with 8 servants
...Not me kid!
My own candy factory, 2 horses
A yacht, an airplane, a couple of sports cars, and a rich boyfriend
Anything else I get will be gravy!

What are some of the factors that influence the goals we set? Here are some ideas; and you can add others:

-- Past achievements. (Experiences that were successful.)
-- Interests.
-- Abilities. (What kinds of abilities?)
-- Unique personal needs. (What are <u>yours</u>?)
-- Parent's attitudes. (Do parents in different social-economic classes have different expectations for their children?)
-- Peer pressure. (Standards set by friends and members of your age group. Your choice of friends may influence your aspiration level and plans for the future.)
-- Economic and social group you belong to.
--
--
--

<u>Question</u>: How might these factors change as you have more education and experience?

* * *

An interesting quotation enccurages us to: "Aim at the sun. You may not reach it, but your arrow will fly higher than if aimed at an object on a level with yourself." How high are <u>your</u> goals? How do you view your own aspirations?

1-- <u>Enthusiasm</u>: do you have it?
2-- Are you <u>satisfied</u> with things as they are? If there are some changes that you feel are needed, do you have the <u>energy</u> to work toward change?
3-- Do your <u>interests</u> change as you explore and learn about new things? Do you learn more about yourself as well as others?
4-- Is it a real <u>challenge</u> to reach some goals and then go ahead and set new goals?
5-- Is life <u>fun</u> because of new and different experiences and accomplishments?

* * *

What hopes and aspirations might you fulfill through a job? Here are some: List others, and think about how important each one is to you. <u>Rank</u> them (1, 2, 3 ...) in order of importance TO YOU. ("I hope that my job will...)

___ Permit me to be <u>creative</u> and original.

___ Let me <u>use</u> my special abilities and <u>talents</u>.

___ Permit me to be <u>helpful</u> to others.

___ Allow me to work with <u>people</u> rather than things.

___ Let me work with <u>things</u> rather than people.

___ Give me <u>status</u> and prestige.

___ Provide a chance to earn a good deal of <u>money</u>.

___ Give me a stable, <u>secure</u> future.

___

___

Studies have shown that people's aspirations can be raised by exposing them to new experiences which help broaden their values, motives, and attitudes. Can you give some examples of how this might be done? ("Upward Bound", one of the government's Economic Opportunity programs is aimed at raising the aspirations of disadvantaged youth.)

* * *

We all find "stumbling blocks" and "closed doors" that make it harder for us to reach our goals. Success breeds success, but sometimes failures stimulate us to work harder. The following examples show that continued effort and action -- not just ability alone -- are required to achieve success.

**Pierre and Marie Curie performed 5,677 experiments in the discovery of radium (a white metallic element used in the treatment of cancer).

**James Watt worked twenty years on his steam engine.

**It took George Stephenson fifteen years to perfect his railroad locomotive.

**Noah Webster labored on his dictionary for thirty-six years.

**William Harvey worked day and night for eight years on his discovery of how the blood circulates before he was ready to publish his findings.

**Charles Goodyear endured unbelievable hardships for eleven years in order to perfect his rubber-making process.

**Cyrus W. Field experienced one disheartening failure after another in his attempt to lay a telephone cable across the Atlantic. But he kept on and finally succeeded.

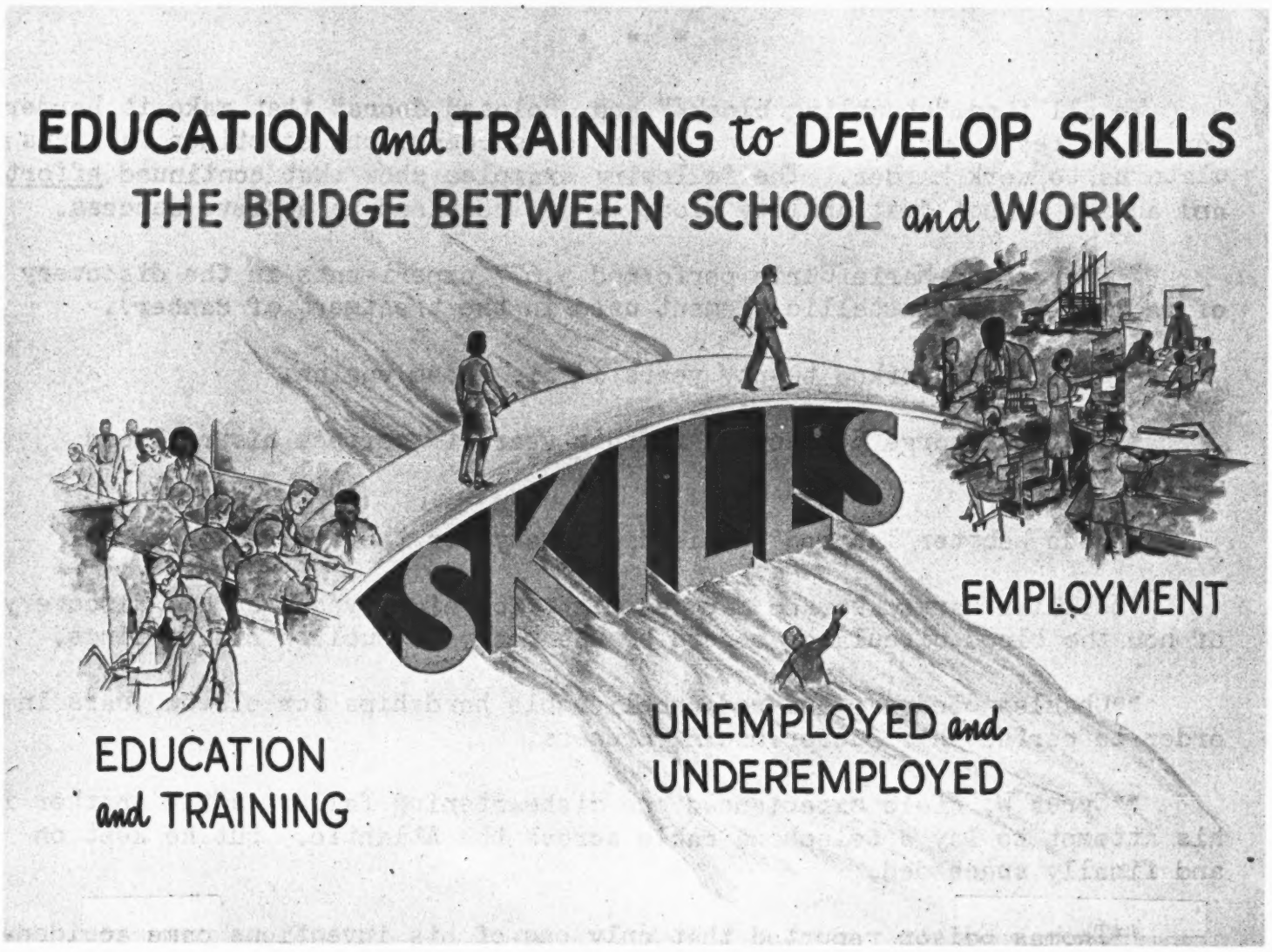
**Thomas Edison reported that only one of his inventions came accidentally -- the phonograph. Most of his inventions were the result of repeated experiments and everlasting trying. For example, Edison and his staff worked for ten years on the electric storage battery, making more than 10,000 experiments before the results looked encouraging.

The formula for success, we have been told, is "one part inspiration and nine parts perspiration." Do you agree, or disagree? Where does "aspiration" fit in?

* * * * * * * * *

Today's Lesson in Brief

We've considered the importance of aspiration in achieving success, and noted some of the ways aspirations are formed and how they change. Perhaps you'll think about your own goals and how they might be achieved through the work you do.




Skills are the bridge between school and work. They are also the bridge between <u>aspirations</u> and <u>achievement</u>. Skills are the abilities that man uses to shape his future. We achieve little by just wanting or hoping. However, when aspiration is combined with skills and action, we increase our chances of achieving our goals.

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## "Who Am I? What Am I Becoming?"

A person's work experience and attitudes will have an important influence on forming his identity -- determining the kind of person he is and the place he makes for himself in society. Individuals go through various stages of development relative to work and personal fulfillment.

* * * * * * * * * *

What are the factors and experiences that have influenced you as you are today and what perhaps will influence you as you become an adult? We do change with time and experience! Thus, who we are is constantly changing; it's a lifelong process. Let's explore how you form your identity and what role work plays in this process.

It's a difficult thing to know oneself -- and sometimes very inconvenient! But let's try to analyze ourselves.

O.K., here you are. What has influenced who you are today?

| Examples: | List some others: |
|---|---|
| 1. Family | 4. |
| 2. Travel | 5. |
| 3. Extracurricular activities | 6. |

Let's anticipate what factors, in addition to the above, may influence "who you are" in the future as you become an adult: (List some others.)

| | |
|---|---|
| 1. Education | 5. |
| 2. Job | 6. |
| 3. Friends | 7. |
| 4. Hobbies | 8. |

* * *

Have you ever thought about the many things you are striving to accomplish while you are still in your teens? List some:

1. New and better relationships with both sexes who are your own age.
2. Achieving more economic independence. (Earning your own money).
3.
4.
5.

* * *

You have considered some of the factors which have influenced your development in the past and some that are likely to affect you in the future. Can we build a dynamic model to show the overall pattern of vocational development throughout a person's lifetime? The following scheme attempts to do this. (Although the ages when we develop our attitudes and skills may differ somewhat, the estimates of time are generally accurate.) This path of development can help men and women realize the values listed in the sketch below.

STAGES OF VOCATIONAL DEVELOPMENT (Age)

1-- IDENTIFICATION WITH A WORKER. Father, mother, other significant persons serve as "models". The concept of working becomes an essential part of your life. 5-10

2-- ACQUIRING THE BASIC HABITS OF INDUSTRY. Learning to organize your time and energy to get a piece of work done (school work, chores). (Teddy Roosevelt used to say: "When you play, play hard; when you work, don't play at all.") 10-15

3-- ACQUIRING IDENTITY AS A WORKER IN THE OCCUPATIONAL STRUCTURE. Choosing and preparing for an occupation, through education and training. Getting work experience as a basis for occupational choice and for economic independence. 15-25

4-- BECOMING A PRODUCTIVE PERSON. Mastering the skills of your occupation. Moving up the ladder within your occupation. 25-40

5-- HELPING TO MAINTAIN A PRODUCTIVE SOCIETY. Emphasis shifts toward the society and away from the individual aspect of the worker's role. The individual sees himself as a responsible citizen in a productive society. He pays attention to the civic responsibility attached to his job. He is at the peak of his occupational career and has time and energy to add broader types of activity. He pays attention to introducing younger people into stages 3 and 4. 40-65

6-- CONTEMPLATING A PRODUCTIVE AND RESPONSIBLE LIFE. This person is retired from his work or is in process of withdrawing from the worker's role. He looks back over his work life with satisfaction, sees that he has made a social contribution, and is more or less pleased with it. While he may not have achieved all of his ambitions, he accepts his life and believes in himself and his identity as a productive person of dignity and worth. 65+

* * *

Does it come as a surprise to discover that we are developing attitudes and habits about work and workers all during our lives?

As you think about what you have learned in Stages 1 and 2, give some additional thought to the following questions: (and be prepared to answer these questions in class)

1) How do you view your dad's job?

2) How do you view your mother's job? (If she's a full-time housewife, consider her role at that; if she is employed part-time or full-time, include this along with her work as a housewife and mother.)

3) Are there any other adult friends or relatives who have influenced your attitude toward work? If so, how?

4) How do you organize your time to get a task done? Do you go ahead and do your studying and chores at home before you start playing or doing the other things you want to do?

5) Have you had any part-time jobs that have helped you form ideas about work -- such as whether you want to work with <u>objects</u> (manual work), or <u>ideas</u>, or <u>people</u>? What have you learned about getting along with people, taking responsibility, and following through to complete jobs?

* * *

Whether a person is going to school or is employed at a job, he needs to feel that:

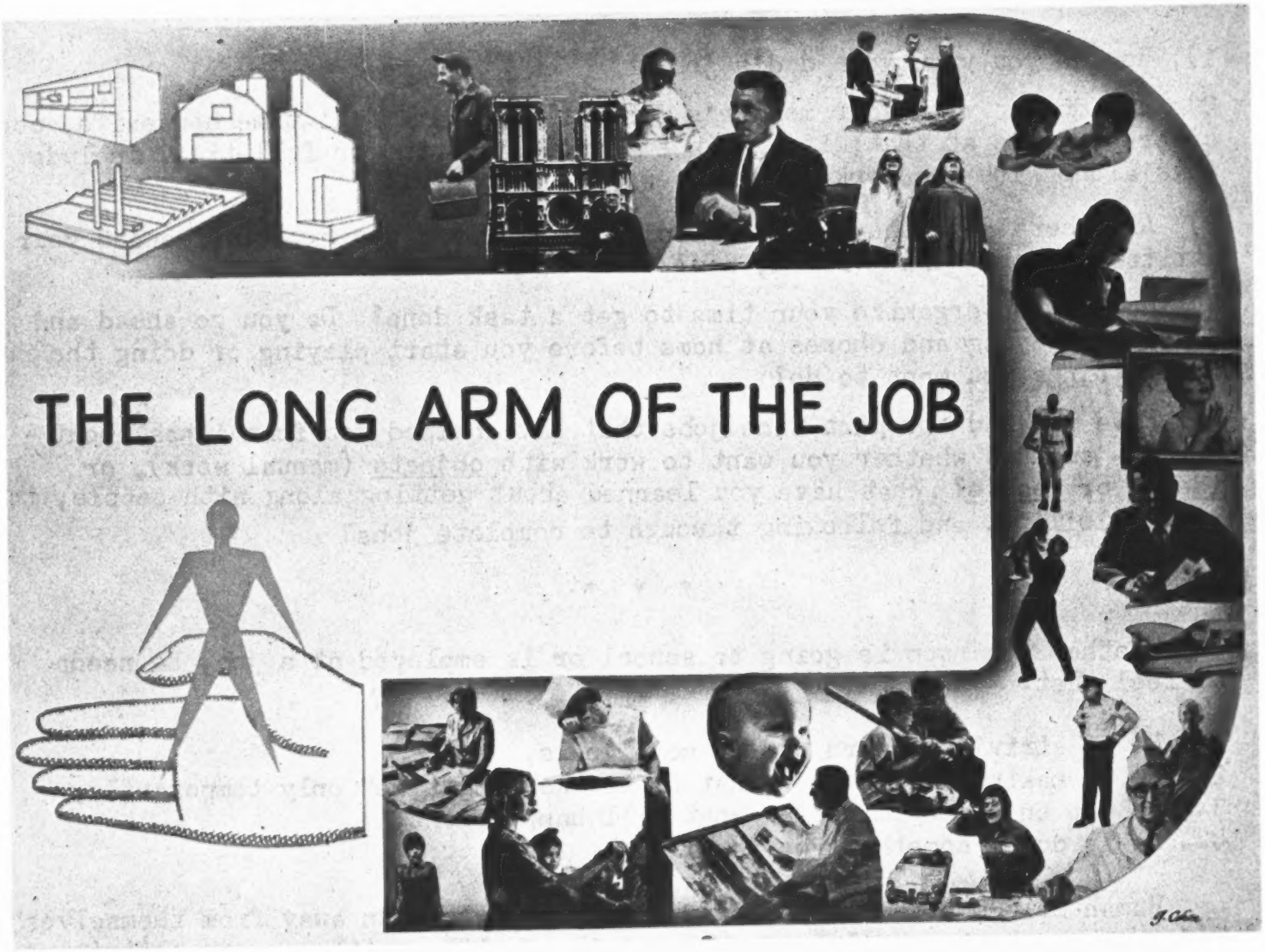
1-- He is striving toward one or more goals,
2-- He is making progress or that he is "marking time" only temporarily,
3-- He can enjoy anticipating what will happen next,
4-- He is doing something worthwhile.

Human beings have always found clever ways to "run away from themselves". Today we can keep ourselves so busy, fill our lives with so many activities, stuff our heads with so much information, and involve ourselves with so many people that we never have time to probe the fearful and wonderful world within us -- and begin to learn "<u>who</u> I really am" and "what I am <u>becoming</u>".

* * * * * * * * * *

<u>Today's Lesson in Brief</u>

Philosophers have urged: "Know thyself," and "To thine own self be true." We are complex individuals! To know ourselves and what we want from life, both personally and vocationally, is a life-long process. We need to reexamine ourselves and our goals periodically since new experiences play a big part in changing who we are.




The job influences our outlook on life and the way we live--who we are and what we are becoming. Since a job may play such an important role in our life, we should be careful in selecting our occupation and particular job. It may be necessary for us to look at more than the size of the paycheck that comes with the job. We may want to find out what satisfactions other than income we can get from the job.

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"I'm a <u>Physical / Social / Psychological</u> Person!"

Who are <u>you</u>, the person who becomes a worker? For purposes of career planning, let's look at you as the end product of your "biological-social-psychological" situation. By identifying the physical, social, and psychological parts of your makeup -- and seeing how these develop over a period of time -- you can gain some insights that will be valuable in choosing an occupation. For example, you can learn what particular characteristics you bring to the job and how a job may affect you.

* * * * * * * * * *

Some interesting theories and explanations have been made to explain the many sides of man, and they suggest the following conclusions:

1-- You have a <u>PHYSICAL</u> (biological) body which has characteristics inherited from your parents and ancestors on both sides of the family. And when these are mixed to form "you", it's unique -- no carbon copies! Unique "you" then grows and develops with air, food, drink, and activity. These PHYSICAL characteristics include your health, strength, and manual dexterity.

2-- Your <u>SOCIAL</u> being is influenced by your surroundings and your experience with all the people with whom you come in contact. SOCIAL characteristics include communications skills, ability to get along with other people, poise and confidence.

3-- The <u>PSYCHOLOGICAL</u> "you", is influenced by your physical body and your social experiences so that you have your own personality, character, attitudes, values and feelings. You set your own goals, and work toward them.

<u>Question</u>: Define in your own words your physical, social, and psychological characteristics. (What kinds of physical, social, and psychological "you's" are there?)

* * *

Not only does our <u>physical</u> development take time, as we grow from helpless infants to mature adults, but our <u>psychological-social development</u> also takes place over many years. Let's consider <u>how</u> and <u>when</u> we acquire our various psychological-social characteristics:

1-- SENSE OF TRUST. (This comes from receiving love and protection and having your needs met. (Example: Loving care from Mother and Dad.) Birth to 1 year.

2-- SENSE OF AUTONOMY. The development of a person's basic individual personality pattern takes place. (Example: "I want to learn and do things for myself!") 1 to 4 years.

3-- SENSE OF INITIATIVE. This is a period of vigorous testing of reality. (Example: Exploring! "Is it true? I must try it!") 4 to 5 years.

4-- SENSE OF DUTY AND ACCOMPLISHMENT. Taking on real tasks and accomplishing them; failing to complete some. (And learning from mistakes, too.) 6 to 11 years.

5-- SENSE OF IDENTITY. "Who am I?" A concept of "self" emerges. ("I am .... a strong and reliable boy;" "I am .... a kind and friendly girl.") 12 to 15 years.

6-- SENSE OF INTIMACY. This is the ability to establish close personal relationships with members of both sexes. (Friends, a marriage partner.) 15 years to adulthood.

7-- PARENTAL SENSE. Creativity and interest in providing material things and security for one's children. (Being able to earn a good income from the job is important.) Adulthood.

8-- SENSE OF INTEGRITY. You establish your own values and unique personality. You become able to accept your life and the people around you. You are "fulfilled" as a person in the sense that you develop as fully as you can your physical, psychological, and social capabilities. Adulthood.

Questions: Which stage of psychological-social development are you in now?
What problems do you find in this stage of your development?
How do you move to the next stages of your development?

People seem to develop and fulfill themselves best when they have a purpose to their lives -- by striving to accomplish something. Work helps to give us this sense of purpose. It helps man test his ideas and skills and provides a means for attaining many of his goals. With purposes and enthusiasm, he can face new challenges! (If we weren't constantly faced with new challenges, would life become boring?) It takes a long time to develop our various biological-psychological-social characteristics and skills! Thus, who we are changes daily, weekly, and yearly.

* * *

You have now analyzed the three separate parts (psychological, physical, and social) of yourself as a person and how they develop. Now, let's put you back together again and consider you as a whole person. (This is one meaning of the term "personal integrity".) It is important to view you as

a total person because when you are employed you bring to the job your whole personality -- all your social, psychological, and physical characteristics. You will probably want to be the "real you" on the job, just as you try to be the "real you" away from the job. However, you may have to do things on the job and put up with conditions that will make you unhappy and frustrated -- and make you pretend to be somebody that you're really not.

The important question for you to consider is whether your job will help you develop your human capabilities as a <u>person</u>? What if .....

-- if you bring physical strength and vigorous energy to a job that requires you to sit at a desk all day. What effect will this have on your personality?

-- if you like to compete and be a leader but have to follow detailed instructions and conform to the demands of an assembly line. How will you react?

-- if the heat, foul air, and loud noises on the job really bother you. Should you spend half of your life -- half of your waking hours -- on a job that clashes with your personal characteristics?

-- if you don't have opportunities to talk to people on the job. How will this affect your personality away from the job?

<u>Questions</u>: List some specific types of physical, psychological, and social conditions of a job which you think would have good and bad affects on your work behavior? For example,

| <u>Good</u> | <u>Bad</u> |
|---|---|
| -- Plenty of light (physical) | -- Very loud noise (physical) |
| -- A chance to work at your own speed (physical and psychological) | -- Supervisors who are constantly checking your work (psychological) |
| -- Friendly fellow workers (social) | -- Fellow workers who talk all the time (social) |
| -- | -- |
| -- | -- |

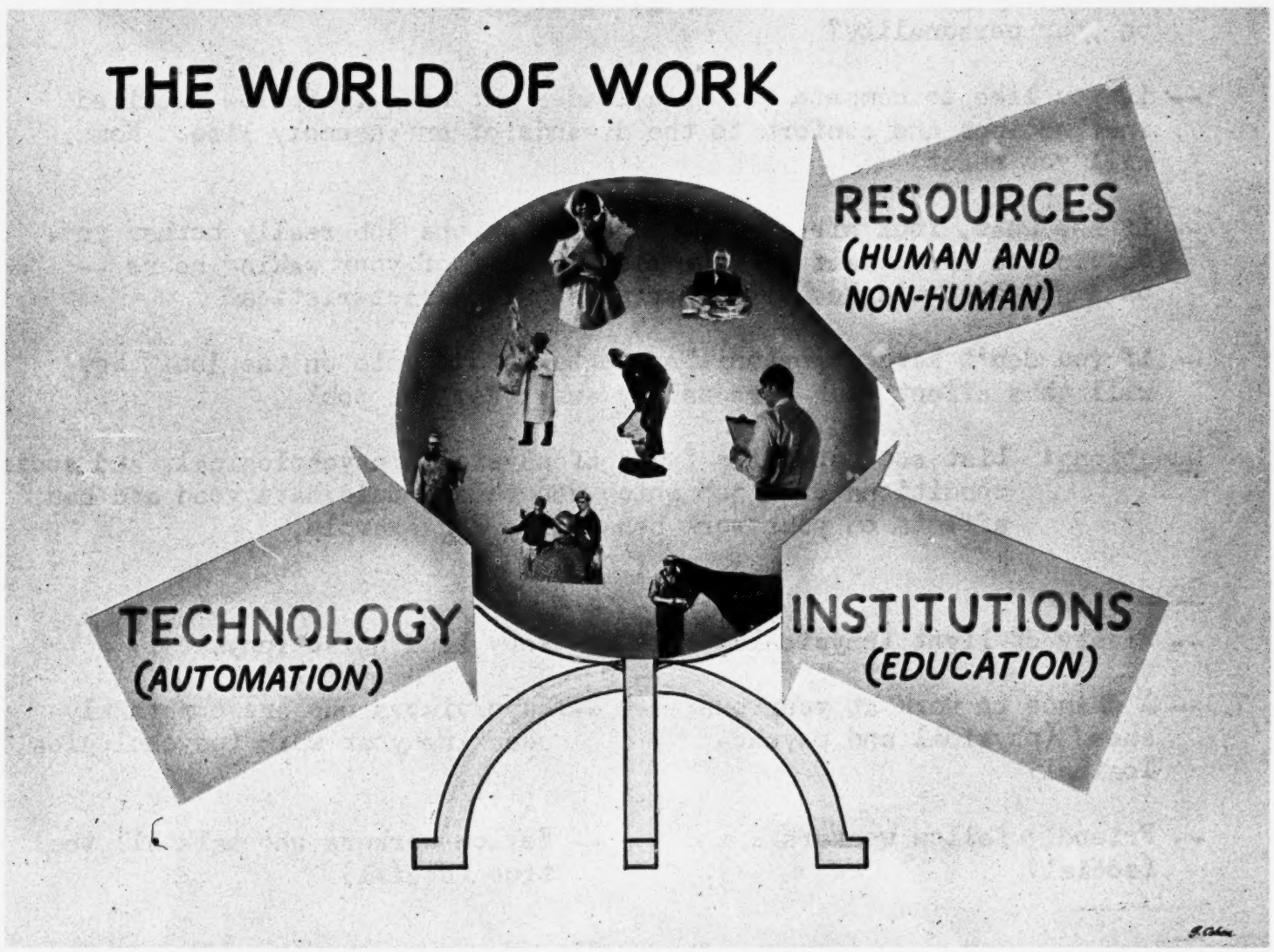
* * *

If you don't have a job that is in harmony with the TOTAL you, you're not likely to be happy or successful and may not even be healthy. If the job doesn't make enough demands on your talents you're just as likely to be unhappy as if the job requires more than you are capable of providing. What you need to ask of a job is: Are you getting the <u>full rewards of work</u>, or are you being short-changed?

* * * * * * * * * *

## Today's Lesson in Brief

We have seen how man brings to his job what he has gained through his total life experience -- his biological, psychological, and social development. Physical, social, and psychological factors continue to influence you both on and off the job. The way they affect you will not only determine the satisfaction or disappointment your job brings, but also the kind of person you are becoming.




These three forces influence what kind of person you are and will become. Automation is changing your world, and human resources are being improved through educational and other institutions to meet this challenge of technology. Our work force is using capital goods and natural resources to create a world which will offer opportunities for creative work to those who have the needed skills.

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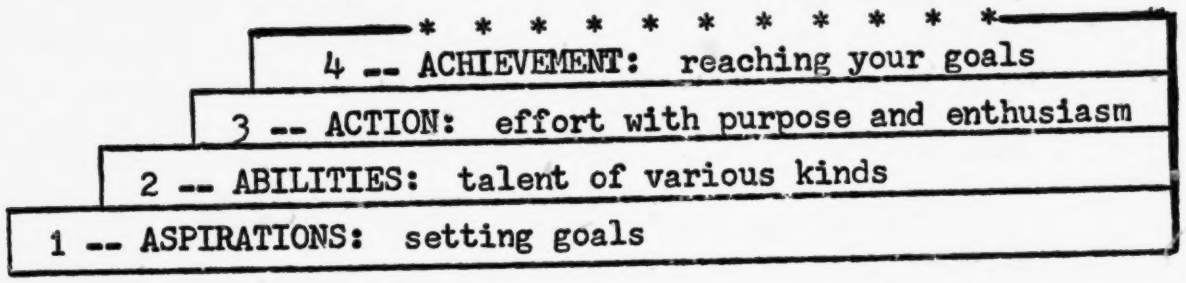
**The Formula: Aspirations + Ability + Action = Achievement**

Most of us want to achieve something. We have a kind of "instinct of workmanship" that makes us actively try to achieve a goal. But how do we go about achieving? What are the personal and social factors which help determine what we are able to achieve. There is a formula: Aspirations + Ability + Action = Achievement that offers some useful guideposts. This formula can be helpful to you in achieving whatever goals you set in life.

* * * * * * * * * *

Let's construct a "Formula for Achievement" in terms of four steps to success (however we choose to define success):


4 -- ACHIEVEMENT: reaching your goals
3 -- ACTION: effort with purpose and enthusiasm
2 -- ABILITIES: talent of various kinds
1 -- ASPIRATIONS: setting goals

* * *

Let's look at the first three A's -- Aspirations, Abilities, and Action -- and consider some of the things involved in these ideas.

First, Aspirations. What goals have you set for yourself? What are your past achievements that you can build upon? What are your interests, ambitions, and needs? By answering these questions you can begin to define your aspirations. (You may want to review the earlier lesson on "Aspirations and Achievement".)

You will need different types of Ability to obtain your goals. The amount and types of talent needed to achieve your goals depend upon the goals you select. As you think about the specific abilities you want to develop, remember the basic manpower skills -- Communication, Computation, Manual Dexterity, and Group Organization. The "CCMG skills" -- with special characteristics of durability and transferability -- are apparently worth while in view of the changing nature of jobs in our economy.

Aspiration and Ability alone will not guarantee Achievement. You must take Action to achieve goals (well-defined and continuing effort directed toward a specific goal is called for). To take action is often difficult for people. It is relatively easy to sit and plan, but a plan that is not acted upon will never lead to achievement.

The following story clipped from a newspaper a few years ago illustrates how one man overcame serious obstacles to achieve his goals.

CASE #1 "Expert Who Saved Many From Cancer Is Dead Of Same Disease"

> "Dr. Grant B. Ward, sixty-one, cancer expert of Johns Hopkins University, died today of the same disease from which he had saved countless patients.
>
> "Dr. Ward overcame a tremendous handicap to continue his career after developing a tumor on the spinal cord of his neck in 1942. The tumor was non-cancerous but its removal cut a nerve and deprived him of the power to raise his right hand and to bend his elbow.
>
> "Although he could still use the fingers and forearm muscles of his right arm, Dr. Ward's career as a surgeon appeared ended. But with the help of experts in appliances, together with his own determination, Dr. Ward made a steel and leather harness equipped with springs to perform actions of his useless muscle.
>
> "To win over his handicaps, Dr. Ward developed certain special skills with his left hand. He asked for no special adjustments in the operating room, except that the table be raised to a higher level. The internationally known expert on head and neck tumors continued performing very difficult and delicate operations."

* * *

Question: What were Dr. Ward's Aspirations? What special Abilities did he develop? What Action did he take?

* * *

Let's look at how types of societies influence our achievement on the job. There are basically two kinds of societies -- the ASCRIBED society and the ACHIEVEMENT society. In an ASCRIBED society, jobs are distributed on the basis of who a person is rather than what he can do. As you can imagine, when jobs are assigned or ascribed on the basis of status, caste, or heredity, it's difficult to move up the economic and social ladder; there isn't much opportunity for "upward mobility". The ascribed society usually doesn't change very rapidly.

In an ACHIEVEMENT society, jobs are distributed mainly on the basis of a person's ability to perform the required tasks. He may have to meet certain standards such as passing a test or having a certain amount of education or training.

No society is completely ascribed or achievement. For example, inheritance of property and having relatives or friends with "connections" may influence the opportunities of a worker, even in an achievement society.

Questions:

1. Is our society mostly an ascribed or achievement society?
2. Can you think of some specific examples of how jobs are actually distributed in our society?
3. What factors set limits on how much people in our society are able to achieve? (Three such factors are listed; please add some others.)

1-- Ability
2-- Environment
3-- Education
4--
5--
6--

* * *

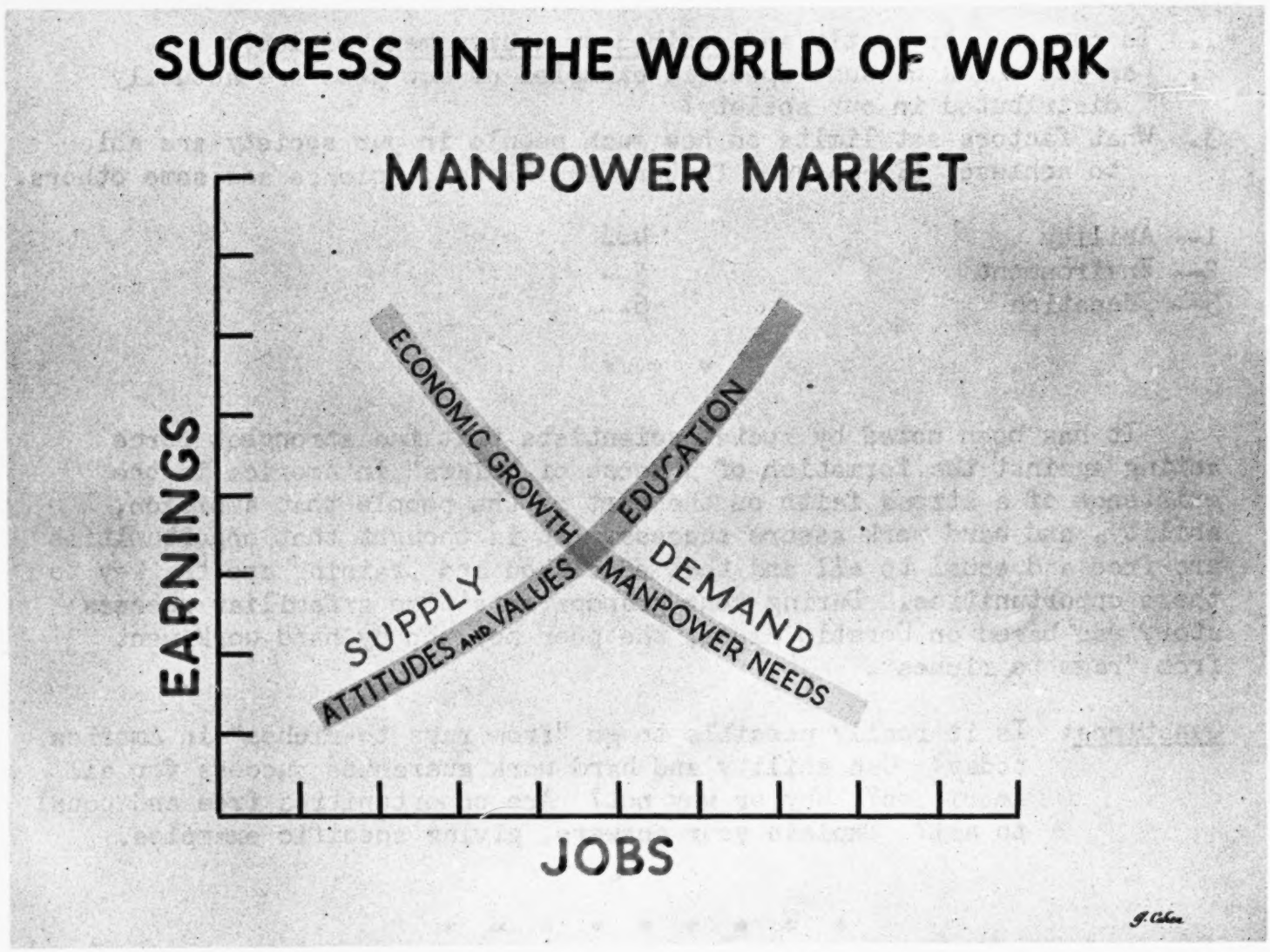
It has been noted by social scientists that the strongest force acting against the formation of a sense of "class" in America is the existence of a strong faith on the part of the people that ambition, ability, and hard work assure success. It is thought that opportunities are free and equal to all and that education and training are the key to these opportunities. During your grandparents' time a familiar success story was based on Horatio Alger, the poor boy who by hard work went from "rags to riches".

Questions: Is it really possible to go "from rags to riches" in America today? Can ability and hard work guarantee success for all Americans? Why or why not? Are opportunities free and equal to all? Explain your answers, giving specific examples.

* * * * * * * * * *

Today's Lesson in Brief

Successful people in our society have for the most part followed the four steps in our "Formula for Achievement". They have combined Aspirations, Abilities, and Action for Achievement. There are many opportunities to apply the formula for achievement in American economic life -- by investing in your own "human capital" and by acquiring the skills needed for intelligent decision-making as a worker, consumer, and citizen. Complete equality of opportunity does not exist in America, or anywhere else. Obstacles to achievement exist, even in our relatively open society.




Achievement or success in the world of work -- both in economic and noneconomic terms -- depends upon the factors shown above that influence the supply of and demand for human resources.

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## Housewife or Career Girl?

"It was the standard proposal of marriage ...
Would I keep my job for a while!"

A kind of "revolution" has occurred in the pattern of women's lives in America. In order to understand and prepare herself for this revolution, a girl needs to consider that during her life she will probably be both a housewife and an employed worker -- often at the same time. Boys and men should recognize how this "new American woman" will, in turn, affect their own personal, social, and economic lives. If the girls of today are going to realize their fullest potential both as homemakers and employed workers, they will have to look closely at themselves and the changing world about them. They will have to think seriously about what they want from life. Information about the changing patterns of women's lives, both in and out of the manpower market, can help girls make the decisions today that will increase their chances for a meaningful life tomorrow.

* * * * * * * * * *

The revolution which is occurring in the patterns of women's lives has several dimensions, as the following information from the Women's Bureau of the U. S. Department of Labor shows:

-- The life expectancy of a girl baby now is almost 74 years; in 1900 it was 48 years.

-- About half of today's women marry by age 21 and have their last baby at about age 30; by the time her youngest child is in school, the mother may have 30 or 35 more years of active life (including "work years") before her.

-- It is estimated that 9 out of 10 girls today will be gainfully employed at some time during their lives.

-- Today we have approximately 27 million women in the labor force; by 1980, it is estimated, there will be over 36 million. More than 1 out of every 3 workers today is a woman; almost 3 out of 5 working women are married and living with their husbands.

-- In 1920 the average woman worker was single and 28 years old. Today, the average woman worker is married and 41 years old.

-- Labor-saving household equipment and prepared foods shorten the time required for housekeeping.

-- The greater economic demands on the family -- such as higher cost of educating children, higher cost of health care, and cost of greater variety of goods and services considered necessary to meet the American standard of living -- increasingly seems to require a "two-paycheck" household.

-- More and more in our society, the opportunity to apply for a job or get a promotion depends on higher levels of education -- and women are getting more schooling.

-- Increasingly women are seeking the right to choose how they will make their contribution to their family and their community.

Questions. Based on the facts and comments listed above, please answer the following questions?

1. How much freedom of choice does a young woman have today for deciding what type of life she will live? How much freedom should she have?

2. "Women must be trained to understand ideas and principles as well as developing 'how-to-do-it' skills because many women will be coming back into the labor force in their early 40's." Do you agree with this statement? Why or why not?

3. Why should women start thinking of preparing themselves for occupations such as medical doctor, scientist, technician, engineer, and manager -- jobs that many women have not prepared themselves for in the past?

4. What does this "revolution" in the lives of women mean for men? Give some specific examples.

5. What are some of the personal, social, and economic changes that have taken place in family life as a result of a wife-mother being both a homemaker and an income earner?

* * *

Another way we can examine the change that has taken place in the old "housewife-career girl" division of women -- a woman used to be either one or the other, not both -- is to look at some typical employment situations that face young married women today throughout our country. As you read the following case studies you might ask yourself what these three young women have in common with one another. Are they Housewives or Career Girls?

CASE #1

(Ann describes her employment situation by first telling something of her background.) "You know Jack and I were married soon after we graduated from high school. Jack got a job at the local automobile assembly plant and earned a good salary and didn't want me to work. We started our family soon after we were married since we both wanted a big family. We had four children; the baby is only two years old. Then last year Jack was hurt in an accident at the plant and couldn't work any more. Although Jack's paycheck was no longer coming every two weeks, we were not left without income. There was the Workmen's Compensation payment (a system of insurance required by state law and financed by employers, which provides payment to workers or their families for occupational illness, injuries, or death resulting in loss of income) and some money from our own insurance policy. However, we had to face it -- our income wasn't enough to support the family."

"Luckily there's a good day-care center near our house. I found out they would take care of the baby during the day, when the older children were in school, and then made the rounds of the stores downtown until I got a job -- selling children's wear. I know plenty about that! I don't make much for a family our size. We don't have a new car or a new TV set, or a new anything as far as that goes, but at least we're all together -- that's the most important thing."

* * *

CASE #2

Mary tells about a different, but nevertheless a typical employment situation which she faces. "Hank and I were married a month after I graduated from high school. He still had two years of college to finish so I got a job as typist so he wouldn't have to drop out of school. We were married three years before our first baby came. By that time I'd had two promotions and was the private secretary of the vice-president of the company I worked for. When I had to quit work to have our baby, my boss told me to let him know if I ever wanted to come back to work again.

"By the time Judy was four, and we were trying to raise enough money to make a downpayment on a house, I called my old boss and asked him if he could find me a part-time job. So I went back to work, filling in part-time at the main office for the girls who were sick or on vacation. Not only did the extra money I made help, but I kept my skills from getting too rusty. Last fall Judy started first grade, and I found that there really wasn't enough around the house to use up my time and energy, so I took a full-time job with my old employer. I go to work after Judy is in school and she stays at a neighbor's house until I get home in the evening. By working full time, I feel like I am more than just a housewife -- that I am making a contribution to the company that I work for. And we find plenty of uses for that extra paycheck I bring home."

* * *

CASE #3

Ruth explains that her employment situation is somewhat different from the other two girls. "The summer between my junior and senior year in high school I worked as a Red Cross aide in a hospital and decided that I wanted to be a nurse. However, I was afraid that the training would cost too much. After school started that fall, I decided to go to Mrs. Smith, our school counselor, and see if she could help me figure out a way to go to nurses' training school. Well, Mrs. Smith was full of ideas. She told me about scholarships and loans for student nurses and encouraged me to fill out some application blanks. And sure enough, by the time I had graduated I had been accepted by one of the best nursing schools in the state.

"After I finished my training, I went to work in the maternity (baby) ward of a large hospital. I worked there for four years before I quit because Bill and I (we were married the previous year) were going to become parents. Our baby is now two and I have returned to nursing on a part-time basis. I'm on call at the hospital for emergencies when they need a special night nurse in the maternity ward. Bill takes care of the baby at night when I have to go to work."

* * *

With the facts from these case studies in mind, how would you answer the following questions:

1. When do women make occupational decisions?
2. Why do women work? Give examples from the three case studies.
3. What types of personal, social, or economic stresses and strains may arise when married women seek employment? Example: It may be necessary for husband to baby-sit with his children while his wife works.
4. What is the "cost" to the family of a married woman who has a job? Hint: Remember the idea of "opportunity costs" that you studied earlier in the course.

* * * * * * * * * *

Today's Lesson in Brief

A revolution has been taking place in the lives of women -- a revolution which affects not only women, but men as well. The old way of thinking of women as either Housewives or Career Girls is now largely obsolete. More and more women are combining both these roles at the same time at different periods of their lives. The personal, social, and economic lives of everyone in our society will be influenced by this new dual role of women.

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## First the Plan, Then the Job!

Choosing an occupation is one of the most important decisions that you will make during your life. It will help to approach this decision in a rational and systematic fashion. By analyzing yourself and studying the types of employment opportunities available, you should be able to increase your chances of finding a job that will meet your particular needs and provide personal satisfaction and rewards. Those who plan for their future are more likely to have a better future.

* * * * * * * * * *

"Two roads diverged in a wood, and I --
I took the one less travelled by,
And that has made all the difference."

-- Robert Frost

You will make many important decisions in your lifetime. Often these decisions will involve choosing among two or more possible courses of action. The decisions you make will to a great extent shape your life and determine whether you will find it meaningful, enjoyable, and fulfilling. It has been said that the four most important things in your life are your birth, your death, your marriage partner, and your job. About your birth you had nothing to say. Your death is largely out of your control. About the selection of your wife or husband you have much less to say than you now believe. But the choice of a job and a career is, within fairly broad limits, in your own hands.

One reason why job planning is desirable in today's rapidly changing manpower market is the fact that the "margin of error" that young people had in the past is rapidly disappearing. In the past, students could quit school and rather easily go out and find a job -- usually as an unskilled laborer. Times have changed. As you have learned in this course, the number of unskilled jobs is rapidly declining. The disappearance of the margin of error is also a result of the rising level of schooling obtained by the labor force.

* * *

Today we will be reading, thinking, and talking about vocational planning and decision-making. Will you please read the first page of your booklet, CHOOSING YOUR OCCUPATION (to be handed out in class) and be prepared

to comment on the following quotes from page 1:

-- "The future course of your life will depend in large measure upon the wisdom of your vocational choice."
-- "A job is not just work and pay; what it will lead to 10 years from now is what counts."

* * *

Pages 3 through 11 of your booklet consider how you can find out which occupation is right for you. Before reading these pages, take two or three minutes to write down some ideas about how you can find out which occupation is right for you. (Hint: What are your personal goals? What types of jobs are there to match your interests and talents?)

1. _____

2. _____

3. _____

4. _____

Now read pages three through nine and when you are done, consider the following statement: "Vocational planning is more than finding a job. It is <u>discovering yourself</u>. The important goal in occupational planning is not merely to learn to market oneself but also to discover oneself." Do you agree with this statement, or disagree? When you have some time you can fill in the information on the self-inventory on pages eight and nine of the booklet. This self-inventory is an important step in occupational planning and career decision-making.

Let's turn to pages 10 and 11 and read these two pages. Note the great variety of sources of help on finding information on employment opportunities listed on page 11. The local office of the Ohio State Employment Service, your school counselor, and your teacher are very important and worthwhile sources of <u>occupational information</u>.

* * *

Please read pages 12 and 13 of the booklet <u>CHOOSING YOUR OCCUPATION</u>, and note especially the following statement on occupational choice and decision-making: "The individual's decision on an occupation is generally limited to those occupations about which he knows something, which are appropriate to his class position and sex status, and which are not barred by ethnic discrimination or by limits of physical or mental ability and money."

<u>Question</u>: What is your reaction to this statement? (True? or False?)

* * *

Now let's turn to page 14 and read this page and pages 15 and 16. (Your teacher has a copy of the OCCUPATIONAL OUTLOOK HANDBOOK and some other material which you may want to look at some time after class or after school is out.) Note the summary on page 15. These are some of the things you want to think about and do in planning and choosing an occupation.

Now that you have explored some of the things involved in vocational planning, you can think about how you personally will benefit and how the nation can gain from <u>your occupational planning</u>.

* * * * * * * * * *

<u>Today's Lesson in Brief</u>

Decisions shape our lives, and one of the most important of all decisions is our choice of an occupation. We have a great deal of freedom in choosing our occupation in America. We can make wise <u>use</u> of this freedom by approaching vocational choice in a rational and systematic matter. The margin of error that existed in the past for young people who failed to plan their occupational future is rapidly disappearing. Planning is a way to increase your chances of finding meaningful and rewarding work. Knowledge of the manpower market and of yourself helps you find work that is right for you. This will result in greater productivity and will contribute more to the nation's total output of goods and services.

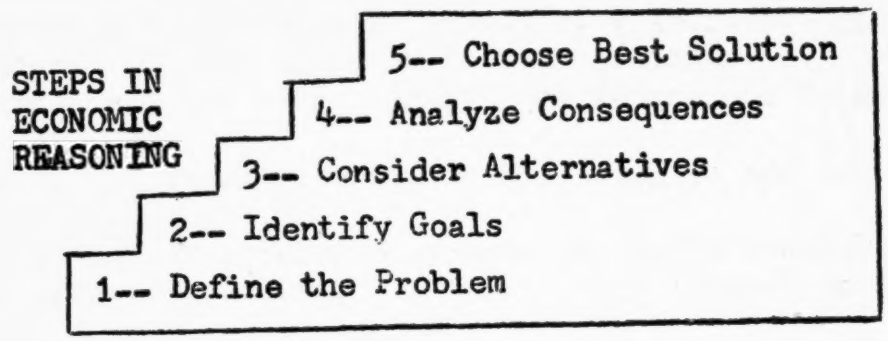
# PLANNING AND RATIONAL DECISION-MAKING

5. SELECT BEST SOLUTION IN TERMS OF GOALS
4. ANALYZE THE CONSEQUENCES
3. CONSIDER ALTERNATIVES
2. IDENTIFY GOALS
1. DEFINE THE PROBLEM
STEPS in ECONOMIC DECISION-MAKING

Careful planning and rational decision-making can help you make wise choices in any area of life. Using facts to help define a problem clearly, identifying the goals you want to achieve, considering a wide range of alternative ways that might be used to reach the goals, and analyzing carefully the probable consequences of each of the alternatives is a procedure designed to produce wise choices and realistic decisions. Following these steps can help you plan your education and training to take maximum advantage of occupational opportunities in the manpower market.

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/D5/#51

## An Exercise in Economic Reasoning: Review Lesson




The steps in economic reasoning can be applied to a variety of economic decisions, including the choice of a career. These five steps are valuable tools for analyzing yourself and the opportunities that exist for you in the manpower market. The concepts, ideas, and data we have discussed in the course -- especially in lessons #25 through #51 -- provide information that you can use in applying the steps in economic reasoning to career planning.

* * * * * * * * *

You will recall in lesson #15 (What Are the Steps in Economic Reasoning?) that we studied a systematic step-by-step approach to problem-solving. This five-step method of economic reasoning is useful to you in planning your career and making decisions about your participation in the manpower market. You can use the five steps as a framework for analyzing yourself and the information you have gained concerning the manpower market, the economy, and the world of work.

> A NOTE OF CAUTION: You should not think that you are actually making your career choice at this time, or that you are somehow deciding today what your whole vocational future will be. This is an exercise to help you develop skill in planning a career. Be serious and thoughtful about the exercise -- consider the ideas and information that you personally will want to weigh before you actually do choose an occupation -- but don't think that you are being asked today to decide your life's work.

* * *

The rest of this lesson takes each of the five steps in logical order and illustrates the concerns and types of questions you will want to consider as you think about your career. By answering the questions that are raised, you will in fact be using the steps in economic reasoning. Lessons that give information about the questions are identified with numbers in parentheses. Be sure to write out your answers as you go through the five steps.

1. Define the PROBLEM. You are making decisions right now about what school curriculum to follow and what subjects to take. In a few years you will be entering the manpower market. Should you begin to plan and make decisions now regarding your future role in the manpower market and world of work? Will an understanding of manpower and the economic world increase your chances of successful employment? Here are some things to consider:

1-a. What are the economic and noneconomic functions of work? (#26, 29, 39)

1-b. What factors affect my chances of successful participation in the manpower market? (#27, 31, 32, 38, 39, 43, 44, 45, 49)

1-c. What are some personal and social benefits from career planning? (#28, 29, 36, 38, 51)

1-d. My PROBLEM is (write out a "definition" of the problem of your career choice):

* * *

2. Identify GOALS. You can identify your goals by asking yourself questions such as: Who am I? What do I want from life? From a job? Do I want to enter a particular field of work? Make a lot of money? Travel? Have leisure time? What are my interests and goals? Only you can answer what it is you want from life in general and a job in particular. Here are some ideas that might be helpful to you in finding out what your personal interests and goals are.

2-a. Who am I? What am I becoming? (Identify some of the attitudes, values, and experiences which influence who you are and what you are becoming.) (#41, 46, 47, 48, 49, 50)

2-b. What are my aspirations in life? (fame? fortune? power? happiness?) (#46, 49, 50)

2-c. What do I want from a job? (#26, 28, 29, 39, 41, 42, 46)

2-d. My GOALS are (write out a brief statement of your personal goals):

* * *

3. Consider ALTERNATIVE METHODS for reaching your goals. Employment offers you an opportunity to achieve some of your personal goals. There are many different kinds of occupations in our economy, and jobs are available in various industries. But as you think about potential types of occupations, you will want to consider such questions as: Do I need schooling or training beyond high school to qualify for employment? What types of work experience should I get to help obtain and keep a job?

3-a. What are some of the jobs I find interesting? (White-collar? Plumber?) (#34, 35, 37, 40, 41)

3-b. In what industries would I like to be employed? (#34, 40)

3-c. Which of the occupations that I am interested in seem to offer the best employment opportunities in the 1970's? (#41, 43)

3-d. Which of the industries that I am interested in seem to offer the best employment opportunities in the future (#45)

3-e. How much and what kind of education, training, and experience will I need to qualify for the various occupations that I find interesting? (#34, 35, 37, 44)

3-f. ALTERNATIVE METHODS of reaching my goals are (write out two or three alternative approaches to achieving your stated goals):

* * *

4. Study the probable CONSEQUENCES of the alternative methods. This involves asking such questions as: If I decide to enter an occupation that requires college or post-high school training, what grades must I earn in school? How will I pay for my post-high school education? What types of rewards and satisfactions will I get from successful participation in the manpower market? Many different types of satisfactions and rewards come from full participation in the manpower market. Employment will influence your whole way of life. However, competition does exist for the best jobs; and obstacles have to be overcome in order to succeed.

4-a. What are the economic rewards from successful participation in the manpower market? (#26, 28)

4-b. What noneconomic satisfactions can I get from being employed in a job that's "right" for me? (#29, 36, 38, 39, 42, 49)

4-c. How will a job affect the way I live? (#26, 28, 29, 33, 38, 39, 41 50)

4-d. What type of competition will I have for tomorrow's jobs? (Will the workers be young or old? Men or women? Well-educated?) (#31, 44)

4-e. The probable OUTCOMES of my use of the different methods are (write out a few of the probable outcomes of choosing just two of the alternatives):

* * *

5. CHOOSE the methods that offer the best solution to your problem in terms of the goals you have picked. You can now make a tentative choice of a course of action to achieve your career goals. This choice should reflect your own personal preferences and your understanding of what this decision requires of you. You also should be aware of what is involved in carrying out this decision. (Effective participation in the manpower market is one means you can use to achieve some of your goals in life. However, your goals will probably change with education and experience, and it isn't easy to know right now what occupations are best suited for your needs.) Keeping in mind the results of the first four steps, proceed to step #5.

5. I CHOOSE the following (tentative) solution to solve my career-choice problem (write out a brief statement of your decision):

* * * * * * * * * *

## Today's Lesson in Brief

The steps in economic reasoning are useful tools to the individual who wants to plan and make decisions about his career. You have used the five steps to study yourself and the occupational opportunities in the manpower market. There are many different occupations, some of which will offer the opportunities you are seeking. The financial and nonfinancial rewards of employment have been identified. Occupational choice and earnings are different for those who come to the manpower market with a good education and those who don't. Your chances of successful participation in the manpower market will be improved if you make some tentative occupational choices early and begin planning and taking action aimed at reaching your occupational goals.

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/D6/#52

## How Do I Find a Job?

There are many different ways of finding a job. Often you can get information and help from relatives or friends. You might go directly to an employer and apply for a job. You can read newspaper want ads, check with private employment agencies, labor unions, the public employment service, or simply depend on your luck. The Public Employment Service -- a government agency operated by the state, with help from the federal government -- offers many valuable services to young workers in addition to actual job placement. Knowledge of the various sources of information and assistance in finding employment can be very useful to you when you enter the manpower market.

* * * * * * * * * *

Let's begin our investigation of how you can find a job by seeing how workers in our economy actually do get their jobs. The job-seeking activity of the typical worker is largely a product of his environment. He often obtains information about employment opportunities from relatives and friends. Opportunity is of prime importance in finding a job: a worker hears that they're hiring at a certain firm, or he knows of a company that will accept employment applications. Labor market analysts estimate that 75% of our workers get their first job through relatives, friends, or chance encounters. Other common methods through which workers find jobs are newspaper want ads, direct application to an employer, labor unions, and public and private employment agencies. Public and private employment agencies fill about one of every five job vacancies, with most of these being filled by the various state affiliates of the United States Employment Service.

* * *

Let's take a brief look at the <u>private employment agencies</u>. There are about 4,000 business firms engaged full-time -- and 2,500 part-time -- in the private placement of workers in employment. They are profit-seeking businesses that "produce" and sell job-placement services. These firms tend to be concentrated in the larger cities. The private agencies concentrate their placement efforts in clerical, sales, professional and managerial occupations; but some of them do business in occupations such as baby sitting, domestic service, and jobs involving unskilled labor. The private agencies usually charge a fee for their services, which is often based on a percentage of the salary earned by the worker they place. In some cases the fee for placement is paid by the employer. Some of these private employment agencies offer the worker job counseling and testing as well as actual job placement.

* * *

In addition to these privately owned and operated employment agencies, there are also public employment agencies. The federal-state Public Employment Service -- the United States Employment Service and the various state affiliates such as the Ohio State Employment Service -- serves about 4,000 communities in the United States through about 2,000 full-time and 2,000 part-time offices. These local offices are administered by state agencies and financed by federal funds raised through a tax paid by employers. The public agencies place a large percentage of farm, service, semi-skilled, and unskilled workers. However, in a recent year they also placed 267,000 professional and managerial; 954,000 clerical and sales; and 316,000 skilled workers.

* * *

Questions

1. Public and private employment agencies fill about one-half of all the job vacancies in the United States. Please check the correct answer. True____ False.
2. About what percentage of workers get their first jobs through relatives, friends, or chance encounters?
3. Private employment agencies tend to specialize in the placement of what types of workers?

* * *

Now let's look at the Ohio State Employment Service (OSES), which is an example of the state governmental employment agency whose services are available to you in your local area. OSES helps Ohio citizens choose, prepare for, and obtain suitable employment. It's local offices provide free employment counseling and testing; occupational information that includes local, state, and national manpower market trends; referrals for training opportunities in such programs as apprenticeship, Manpower Development and Training Act institutional and on-the-job training, Job Corps, and Neighborhood Youth Corps; and job placement both locally and outside of the local area. In some of the larger cities of Ohio (and elsewhere) State employment agencies have established Youth Opportunity Centers (YOC) which are designed especially to help young people get skilled training, gain work experience, and obtain jobs when they become employable.

You may wonder about the 50 State employment services and how successful they are in helping young people. Do you know -- What type of questions the State employment services interviewers and counselors ask young workers? What the interviewers and counselors actually do for young workers? Whether the efforts of the State employment services always result in placing young workers on good jobs?

We are going to look at two actual case studies of young workers who came to one of the State employment services Youth Opportunity Centers for help in getting a job. These cases -- the names are fictitious -- will give you some insight into the policies and procedures of the State employment services. The experiences of these young workers, reported on the next pages, are told by their employment counselors. As you read each of these cases, see if you can find some of the answers to the questions we asked above.

CASE #1 SALLY GREEN

"Sally Green, who was nineteen, first came to the office seeking some sort of factory work. She followed the usual procedure of filling out an application and then was interviewed.

"During Sally's visit to the office, the interviewer noted the following information: Sally was an above-average student at a small Northeastern Ohio high school. She tended to do best in courses like Shorthand (A), Typing (B), and General Math (B), History 2 B's), and English (C and 2 B's). Her weakest areas seemed to be Science (2 C's) and Languages (D and 2 C's) with the exception of French I in which she earned an A in summer school. In the beginning of her junior year, at the age of sixteen, Sally quit school and got married. She now has two children. Her husband left school in the sixth grade and can neither read nor write. He works at a plastics factory and earns $240 a month. The family had recently acquired extra expenses and Sally felt that she must work to supplement their income. She took a job as a store clerk at a dairy store where she tripled as a waitress, cashier, and cleaning woman -- all for $1.00 an hour. This job lasted only three months when she had to quit because of difficulties with her babysitter.

"On her first visit, we found nothing suitable for Sally in factory work. She left the office thinking that perhaps she would find a job on her own.

"Two months after the initial interview, she returned for her second visit to the office. This time the interviewer felt that Sally could benefit from some guidance from an Employment Service counselor since she expressed an interest in training but was uncertain about the choice of training. Sally spent almost an hour with the counselor exploring areas of interest, school and work experiences, and occupational information. She was pleased to find someone who would take time to help her think through what she wanted from work and life and assist her in planning a way to obtain her goals. Results of an interest check-list inventory which Sally's counselor gave her seemed to indicate that Sally's chief occupational interests were in the areas of bookkeeping and clerical work. She also expressed interest in writing, sketching, and baking. The areas she seemed to dislike most were sales, laboratory, and mechanical work. At this point, the counselor gave Sally some occupational information concerning the areas in which she had shown interest. Sally discovered that the counselor was able to provide some facts about the work she was interested in, including job opportunitie pay, working conditions, and requirements for entry. (The counselor used the OCCUPATIONAL OUTLOOK HANDBOOK and the EMPLOYMENT INFORMATION SERIES, which contain specific job descriptions.)

"On the basis of school achievement, interests, and occupational information, Sally's decision was to apply for a clerk-typist training course. Since she and her husband lacked funds, she was happy to learn under the Manpower Development and Training Act she could receive free training.

"The YOC helped her to find a stop-gap job until the clerk-typist course was scheduled to begin. She worked as a waitress for one month; then as a toy demonstrator (two nights a week) for a month.

"In November, Sally had a final interview for clerk-typist training. She began training two weeks later at the local Manpower Development and Training Center. In April, the Ohio State Employment Service testing department administered some of the standard typing tests to her and she achieved a score of 50 words per minute.

"At the end of the training course, Sally came into the office again to look for general office work. She had received a good rating from the training center and had also passed the city, state, and federal tests for a clerk-typist. She had also received a high school equivalency certificate. Sally was referred to a local university and was hired as a clerk-typist at $260 a month."

Question: Briefly outline some of the services that the Ohio State Employment Service provided for Sally Green.

SG-1. _____

SG-2. _____

SG-3. _____

* * *

CASE #2 CARL STANLEY

"Carl Stanley came to the Youth Opportunity Center after having spent more than two years in juvenile institutions in Ohio. He had been involved in petty theft and was finally sent the Boys Industrial School (BIS) for incorrigibility. From there he was sent to the Training Institute of Central Ohio (TICO), where he received training in Cooking and Auto Mechanics. It was not till six months after his release on parole, that he came to the Ohio State Employment Service's Youth Opportunity Center for help.

"Carl's work history indicated that after his release from the correctional institution he had quickly gotten a job as a banquet waiter at a local hotel and had worked for one month. He had left the job because of "too little pay", -- he had been getting 91¢ an hour. He next worked for three days at a drive-in restaurant as a dishwasher for $1.00 an hour and left that job because of a "misunderstanding". His last job had been that of laborer in a foundry where he worked as a shake-out man, specifically cleaning dirt off molds by shaking and brushing them. He made $2.04 an hour but he was "laid off" this job.

"Further exploration by the interviewer gathered additional background information. Carl was 19 years old, one of two children; he had an older sister, and his father had seldom lived in the home. His mother had raised them with the help of relatives and welfare assistance. Carl had been in the junior year of high school when he was sent to BIS. He finished his junior year in the BIS and TICO. He had gotten married since his release but was not living with nor supporting his wife. He stated he was interested in getting a job as a service station attendant.

"When no appropriate job was discovered in our files, Carl was referred to an auto wash but was not hired. Subsequently, he was referred to a uniform rental agency as a laborer, but was not hired. Later he was called in to take a test for a company that was looking for machine operator trainees. However, he did not report for the test.

"About a month later he was back in the office, and because the interviewer felt he did not make a good impression and was unsure of his choice of work, he was referred to the counseling department.

"Initially, the counselor explored with Carl his interests. The youth stated he wanted a chance to be a grill cook. The counselor set the stage by calling an employer, telling him of Carl's juvenile record, and arranging an interview. Because Carl was dressed in dirty trousers and was not clean shaven, the counselor advised him to go home and clean up before going to the interview. He was specifically advised to cut and clean his long fingernails. He ignored the counselor's advice and was not hired when he went to the job interview. When Carl returned to the YOC office a few days later, he said he felt he had been refused the job because of his race. The counselor suggested this was the easy way out, that if Carl had made sure his appearance was unobjectionable, this might be the case, but he could not be sure. The importance of a person's appearance and the first impression a person makes were discussed. Subsequent counseling of this youth directed towards changing a negative attitude, reflected in his dress, appearance and behavior was largely without any results. Although Carl acknowledged the need for him to make changes in his approach to employment, he never put these things into practice. Later in the counseling process, Carl expressed an interest in a local Manpower Development Training Act instructional program (courses for Building Maintenance and Stock Clerk were scheduled at the time) and as a result he was given the General Aptitude Test Battery. However, he refused training on learning he would only get a small allowance instead of wages during the training. Out of town training in the Job Corps was also discussed but rejected by Carl because he did not want to leave the city. He asked to again be referred to a job.

"Carl obtained a job at a "pancake house" but the job lasted only three days before he was fired. He told his counselor that "I did not fry the bacon crisp enough". After this job experience, the counselor discussed with Carl the possibility that he was better fitted for some other type of work. Carl agreed to trying a different type of job and he was referred to a factory as a trainee in a motor repair shop. He was not hired. Carl returned to his counselor discouraged and ready to quit trying to work at all. "I don't really have to work," he stated. The counselor spent some time talking with Carl and he left with his spirits apparently lifted. Later that same day, Carl returned to see the counselor. He announced that he had gotten a job on his own as a bus boy at a restaurant. He was very proud that he had gotten the job by himself.

"It turned out that Carl worked only one day as a bus boy before being fired for picking up a waitress's tip. He told the counselor later that he had not meant to keep the tip but only to save it for the waitress. After this experience, the counselor tried again to get Carl to see how his actions were defeating his stated purpose of getting and keeping a job. Not long after this he quit coming to the OSES. A notice sent to him by his counselor came back with the notation "Moved -- Left No Forwarding Address"."

Questions: Please check the correct answer.

CS-1. Your State employment service requires workers to take the jobs to which they are referred. True_____ False_____.

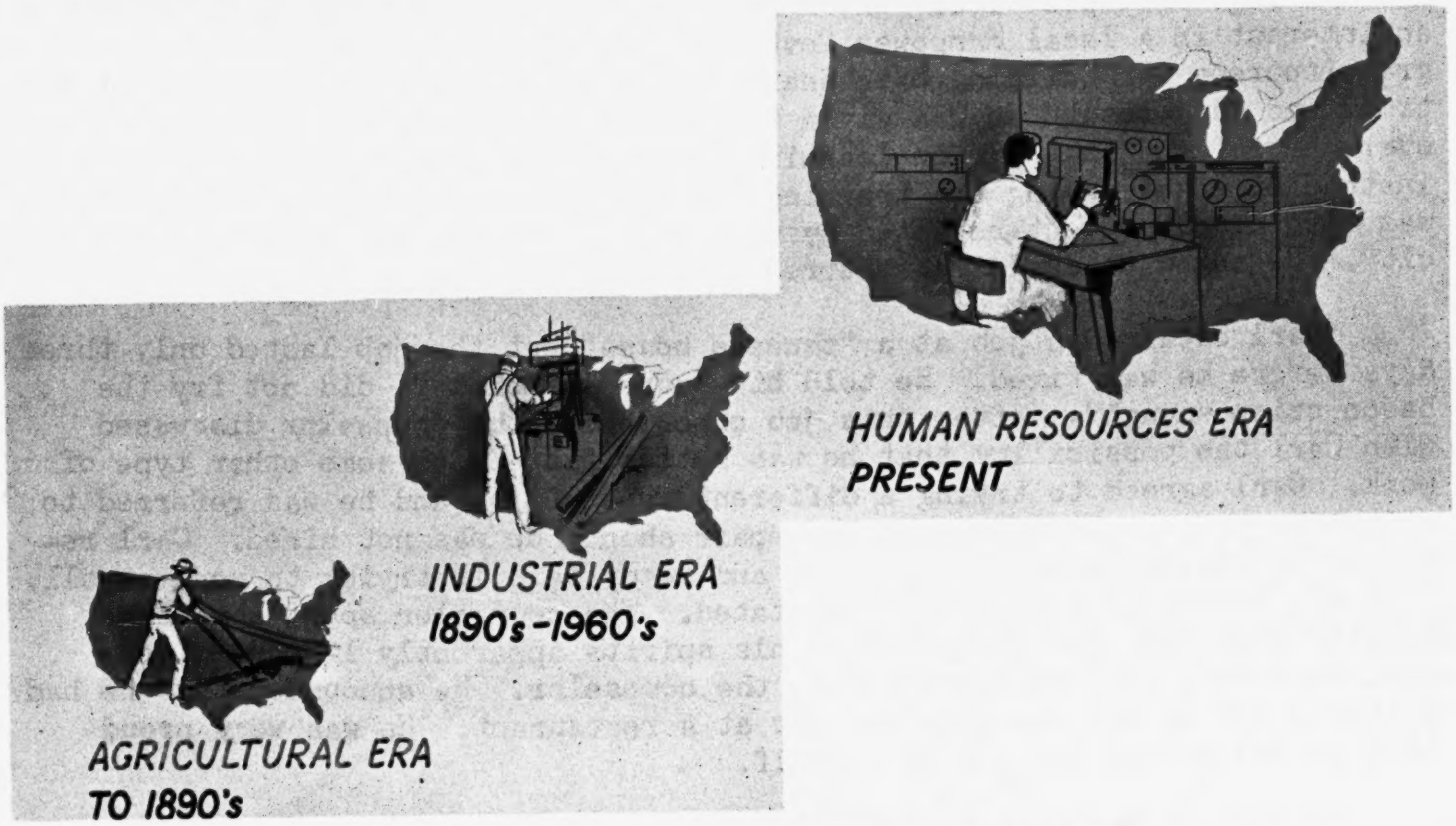
CS-2. The YOC will guarantee every young person a job. True_____ False_____.

CS-3. If you fail to get a job that your State employment agency refers you to, you are no longer eligible for its services. True_____ False_____.

* * * * * * * * * *

## Today's Lesson in Brief

Public and private employment agencies, labor unions, direct application to employers, friends, relatives, newspaper want ads, and chance contacts are sources of help for you in finding a job. You can use one or all of these aids in seeking employment. Some of these forms of assistance--such as those offered by your State employment service -- are more valuable than others in that they provide counseling services and information on training opportunities as well as job placement.




In the Human Resources Era, employment opportunities are excellent for those who have or can get marketable skills. "Employability" -- having the skills, attitudes, and values that employers require of their workers -- is the key to your getting and keeping a job in the American economy.

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/M5/#53

## Skills for Your Skill Bank

"Education must provide, as a basic part of its human development responsibility, the preparation needed for effective participation in our economic life."

-- Manpower Report of the President, 1964

In order to participate successfully in the economic life of our society, as a worker and income-earner, you will need to have skills -- the ability to use knowledge effectively. One of the most important facts of American economic life in the second half of the 20th century is that you "can't get tomorrow's jobs with yesterday's skills". New kinds of skills are needed in our constantly changing Human Resources Economy. These skills are acquired or developed through education, training, and work experience.

* * * * * * * * * *

"Skill" is the ability to use knowledge effectively. Skill is technical proficiency. Skill is knowing how to get the job done and being able to actually do it.

Manpower skills are the most valuable resource that an economy can have. As we pointed out earlier in this course (lesson #21, The Knowledge Explosion), the application of scientific and technical knowledge to the production of capital goods (such as machinery, buildings, equipment) and consumer goods and services (such as cars, TV sets, food, clothing) is the most important factor in the development of our "economy of abundance." Men and women -- workers, human resources -- are the factors of production that apply knowledge to get the job done. You will recall that this is the most important difference between the advanced economies (including the U. S., Britain, the Soviet Union, Japan, etc.) and the underdeveloped economies of Asia, Africa, and Latin America. The richer countries have a more advanced technology spread throughout the economy, along with a vast supply of highly-skilled manpower, while the less developed countries are lacking in skilled manpower and modern technology.

Manpower skills certainly are important to the economy as a whole, and a major cause of economic growth. How important are manpower skills to individual members of our economic society?

Of course, you already know the answer: skills are extremely important. Workers with the highest skills generally qualify for the best-paying jobs. Workers without job skills not only get low wages, but often they can't even find a job. In the middle of 1967, the unemployment rate

for Professional and Technical workers stood at 1.4%. For Unskilled Laborers (nonfarm) the unemployment rate was 7.9%. In other words, the unemployment rate was almost six times as high for unskilled laborers than for the highly-skilled professional and technical workers. You may recall lesson #28 (What's In It for Me?) showing that lifetime earnings for college graduates were more than double the earnings of workers having only eight years of schooling. The skills acquired from college training helps these graduates to earn, on the average, an extra $370 a month above the earnings of male workers having only eight years of schooling.

Education, training, and skills will continue to bring bigger "payoffs" in the human resources economy of the future. We'll study these personal economic rewards further in future lessons.

* * *

Acquiring skills is like putting money in the bank. As you develop more and better skills, you increase your employability and your earning power. Just as a healthy bank account makes you (and your family) feel more secure, a healthy "skill bank" makes a worker feel more confident and secure in terms of the role he can play in our economic life. (Putting the skills to work for you involves something more, of course. You must learn where the opportunities exist in the manpower market and be willing and able to adjust to the demands of employers. This may require you to move to a different community and perhaps even adopt a somewhat different way of life.)

Let's identify some basic skills that are valued in the manpower market, and study the characteristics of these valuable manpower skills.

Years ago, our economy was built on muscle power; today our modern economy is built on brainpower. The four types of skills needed for today's jobs and tomorrow's jobs are:

** Communication (using WORDS -- both written and oral -- effectively)

** Computation (using NUMBERS effectively)

** Manual Dexterity (using your HANDS effectively)

** Group Organization (working effectively with other PEOPLE)

Let's examine each of these skills more closely.

* * *

Because our economy is becoming more and more specialized and interdependent, we rely increasingly on communications to get our work done. Books, pamphlets, training manuals, reports, instruction sheets, business forms -- the printed page -- tell us what work to do and how to do it.

Instructors and on-the-job supervisors use the spoken word to explain how a job is done (a teacher must be able to communicate effectively in order to teach successfully). We read newspaper ads to inform us of job opportunities (and somebody writes these ads). Application forms, with instructions "in small print", must be filled out when applying for a job. Reports must be written, distributed, and read in order to keep managers and officials informed of what's going on.

Today, more than ever before, the American worker is required to read, speak, and write effectively in order to get a job and perform it successfully.

A second important skill is Computation, or Calculation -- being able to work with numbers quickly and accurately. A worker who can copy numbers quickly and accurately for record-keeping purposes, perform simple operations such as adding and multiplying, and "make change" accurately at the cash register has skills that are very much in demand by today's employers. Mistakes due to carelessness or inability to "process data" can be costly for a business firm -- and sometimes can even cost the inept worker his job.

The third basic skill is Manual Dexterity, which is the ability to work effectively with your hands. ("Manus" is Latin for "hand"; manual work, manipulate, handling things -- all these terms imply working with your hands.) The ability to use tools, operate office equipment, wrap packages, assemble parts of a machine, stamp invoices, and do similar jobs is extremely important in the production process. It isn't enough to know how a job is done. What counts is being able to actually do the job. (The president of the company may know how a piece of electronic equipment is supposed to be assembled; but he may lack the manual dexterity, or "motor skills" required to actually perform the work.)

Finally, the fourth basic skill needed in our modern economy is Group Organization. This is especially important in service-producing industries -- the sector of our economy that is expanding most rapidly -- because it involves interpersonal relations and the ability to work effectively with other people. Today, few people in our economy work alone, as individual producers. For the most part, we work in groups. Social skills are required to work effectively with other people, and to perform your own job in such a way that it contributes smoothly and efficiently to the overall task at hand.

Questions: Which one of the four basic skills is most important in our modern economy? Which skill is hardest to develop? What basic manpower skills are most likely to command the highest rewards in the 1970's and beyond?

* * *

Let's review what we have learned about the basic "CCMG manpower skills" by seeing ho they apply in the following case studies:

#1) Betty Murphy, who has never worked for a mail-order company before, decides to fill out an application form (requiring her to read the instructions and write the proper information). Then comes a personal interview, in which she listens to a personnel assistant explain the job requirements and then demonstrates her own oral communication skills by answering questions and discussing her qualifications for the job. Because she can read descriptions in a catalogue, is good with numbers, and can speak clearly and distinctly, she is hired as a telephone order clerk and becomes a valued employee. Eventually she may be promoted to supervisor.

#2) Kitty Harrison applies for work as an assembler in a local factory specializing in transistor radios and electronic equipment. She can't quite figure out what "they mean" on the application form, and she leaves several items blank. Her handwriting is messy, and she spells seven words incorrectly on a single page. The company representative who interviews Kitty is "impressed" with her long, pointed fingernails and the two buttons that are missing from her jacket. Kitty says she doesn't enjoy working with people, is a "slow reader", didn't do very well in arithmetic in school, and doesn't like to "take orders from anybody". Question: If you were the interviewer, would you recommend that Kitty be hired? Why or why not?

* * *

The four kinds of manpower skills we have identified as being of greatest importance for tomorrow's workers -- Communication, Computation, Manual Dexterity, and Group Organization -- are not exactly "revolutionary". We are all familiar with the three R's -- Reading, 'Riting, and "Rithmetic; and vocational education programs have always stressed Manual Dexterity (under the heading of "skill training"). But in the future, Reading and Writing (communications skills) will be more important than ever. Arithmetic(computational skills) will continue to grow in importance. Some of the older Manual Training skills have become outdated, though others continue to be extremely valuable. Group Organization (and personal relations skills) gain importance in our highly organized society.

What is important about the "CCMG skills" for the "manpower revolution" of the second half of the 20th century is that they all must be open-ended. These four skills are important because they are basic, they are durable, are transferable (to new and different jobs), they are versatile (can be used in a wide variety of specific occupations and jobs), and they can be used in acquiring new and different specific job skills in the future. (NOTE: manpower experts say that the average young workers today can expect to change occupations three or four times, or more, during his lifetime.) The young man and young woman -- in school or on the job -- who can build up a solid "skill bank" today will be able to draw on these basic skills for the rest of his or her working life. Through continuing education and training, these workers will be able to keep up with changing manpower requirements year in and year out. On the other hand, the worker

who fails to build a solid base of manpower skills and acquires only a limited, narrow, specific job skill, will face insecurity and high risks of unemployment and low earnings for the rest of his working life.

Questions

1. How can you acquire the four basic manpower skills described in the lesson?

2. In what sense is the ability to get along well with other people a "manpower skill"?

3. How can Communication skills acquired in school help a worker acquire additional occupational skills after he leaves high school?

4. What are some specific activities, outside of school work, that can contribute to building your own personal "skill bank"?

* * * * * * * * * *

Today's Lesson in Brief

In order to participate effectively in economic life, a worker must have manpower skills -- the ability to use knowledge effectively on the job. Skills that are basic, durable, versatile, transferable, and open-ended will prove most valuable for a worker's personal "skill bank". Four basic manpower skills identified in this lesson are:

Communication

Computation

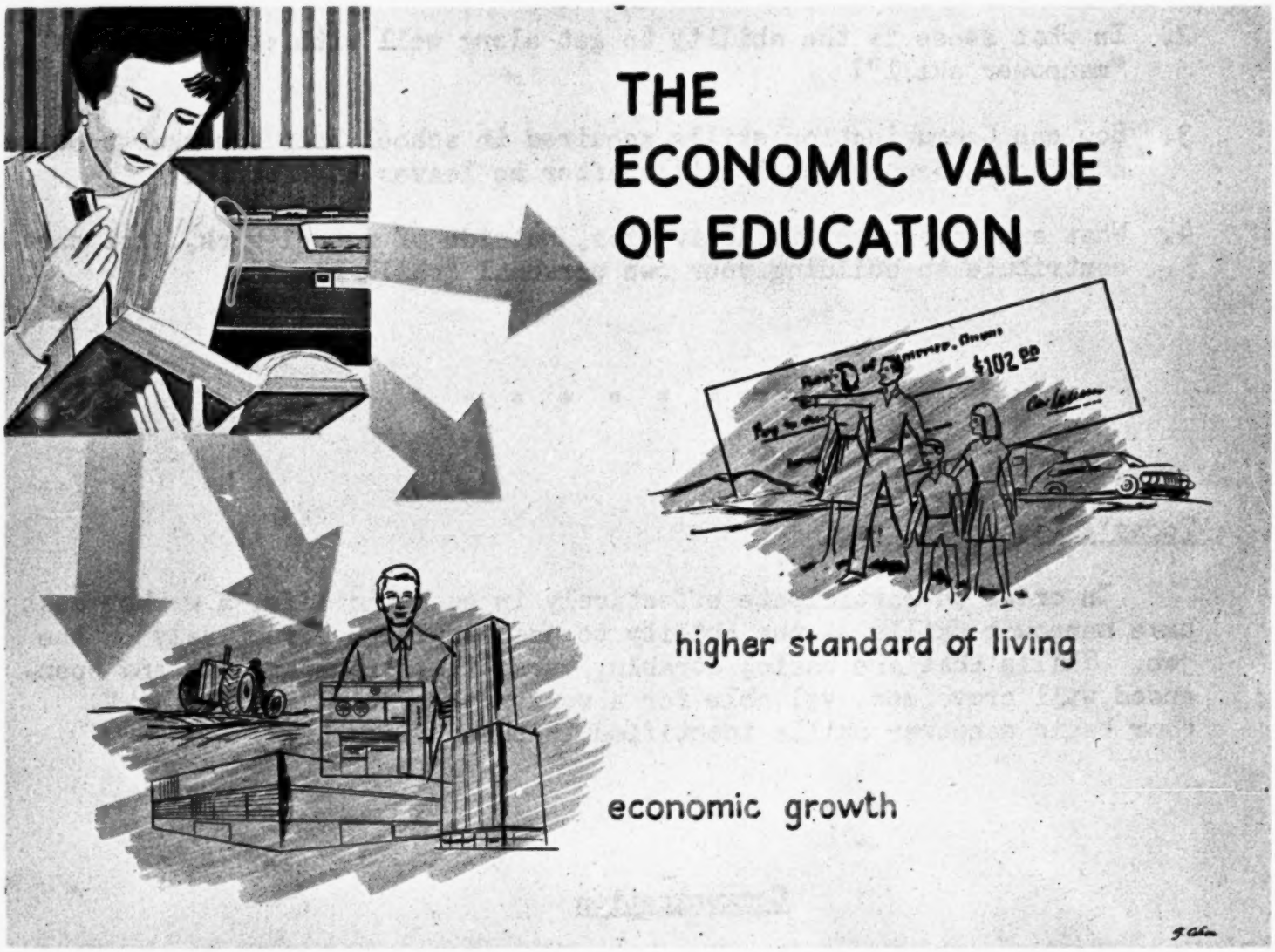
Manual Dexterity

Group Organization

* * *

"The individual does not have an education unless he has occupational skills."

-- Grant Venn (In American Vocational Journal)




Skills are the means of getting and keeping a job. They make it possible for us to be more productive workers. This higher productivity creates additional goods and services that can provide workers with a higher standard of living while promoting the economic growth of society.

ROBERT L. DARCY and PHILLIP E. POWELL. Published and distributed by the Joint Council on Economic Education, 1212 Avenue of the Americas, New York, N. Y. 10036, and The Interstate Printers and Publishers, Inc., Danville, Illinois 61832. 1968/53/#54

## How Can I Get the Skills Needed for Tomorrow's Jobs?

Most of tomorrow's jobs will require more skills and different skills than jobs required in the past. In order to acqure the needed skills, men and women can enroll in a variety of different training programs available in many areas of the country. A knowledge of these educational opportunities will be valuable to you in preparing for your entry into the manpower market of the 1970's.

* * * * * * * * * *

Before we examine the educational and training programs available to provide you with occupational skills, let's see where the men and women in today's labor force actually got their formal job training. Workers have acquired formal job training in many different types of schools and training programs. Table I shows the source of formal training for adult workers having such training as of April 1963. The table indicates, for example, that one out of every nine workers (11%) who had received formal job training got his training in the Armed Forces. Of all the women workers having formal job training, 28% received their training in Special Schools such as business, nursing, and beauty schools.

Table I. SOURCES OF FORMAL TRAINING PROGRAMS TAKEN BY WORKERS*

| Source of Training | Total (percent) | Men (percent) | Women (percent) |
|---|---|---|---|
| High School | 38% | 30% | 55% |
| Special School (business, nursing, beauty, etc.) | 19 | 15 | 28 |
| Armed Forces | 11 | 16 | 1 |
| Apprenticeship | 8 | 12 | 1 |
| Company School | 7 | 7 | 5 |
| Correspondence Courses | 6 | 8 | 2 |
| Technical Institute | 6 | 8 | 2 |
| Junior College | 5 | 4 | 6 |
| TOTAL ALL SOURCES | 100% | 100% | 100% |

*Includes all workers in the civilian labor force 22-64 years of age, have less than three years of college; data for April, 1963.

SOURCE: U. S. Department of Labor, Office of Manpower, Automation, and Training, Formal Occupational Training of Adult Workers, December 1964 in S. Wolfbein, Education and Training for Full Employment, 1967, p. 71.

Questions from Table I:

1. Company Schools operated by American business firms provided most of the formal job training that their employees had as of 1963. (Please check the correct answer.) True_____ False_____.
2. What percentage of workers had received their training from technical institutes?
3. What was the source of training for over half of the women workers?
4. What three training sources together accounted for two-thirds of all training received by workers?
5. Why do you suppose so few women are trained by apprenticeship programs?

* * *

Let's begin our examination of available training programs by looking at the ones offered in the public High Schools. Over half of our high schools throughout the nation offer vocational programs for their regular day students and also for employed and unemployed out-of-school youth and adults. (Six million people are enrolled in these programs -- half of them are adults). Vocational education programs are designed to train both men and women for useful employment in skilled trades and industry, agriculture, home economics, office occupations, and retail trade. These vocational courses prepare students for such occupations as automobile mechanic, apprentice carpenter, farmer, practical nurse, salesman, secretary, and machine operator.

In Ohio there are more than 200,000 people enrolled in vocational education programs. (Two-thirds of these students are adults). More high school students in Ohio are enrolled in the clerical office practices program (typing, filing, using office equipment), than all the other vocational programs combined. Some students who are enrolled in a general or college preparatory program arrange to include individual vocational courses in their studies in order to gain occupational skills. Many high schools now include work experience or "cooperative" programs in their curriculum. These programs are usually a part of the vocational curriculum of the school and combine study in the classroom with work experience on a job. The general purpose of these work experience programs is to prepare students for useful employment in occupations while they are completing their high school education.

* * *

About 14% of the workers in our civilian labor force received their formal occupational training by attending a college or university for three or more years. There are many different types of programs in the colleges and universities that will provide many CCMG skills (especially Communications, Computation, and Group Organization) needed for employment in professional and other types of occupations. Junior Colleges -- two year colleges -- also offer many types of programs which provide the means of learning a variety of job-related skills. For example, some junior or

"community" colleges offer programs in computer programming, nursing, and automative and aircraft mechanics.

* * *

Special Schools and Technical Institutes -- both public and private -- offer a wide variety of programs for preparing for technical, office, industrial, and personal-service occupations.

Questions. What types of vocational education programs does your high school offer? For what occupations can the vocational education programs in your high school help prepare you? What public or private technical, business, and trade schools are there in your community?

* * *

In the remaining three types of training programs we are going to discuss, the worker gets his training while on the job. This form of training involves learning a job by actually practicing the skills needed to perform the work. It is the oldest type of program for learning occupational skills. Craftsmen and tradesmen have been recruited and trained on the job since the dawn of history. The men who shaped and laid stone for the pyramids in Egypt, who wove silk in northern Italy during the Renaissance, who built ships on the River Clyde in Scotland in the 18th century, or who printed copy for Benjamin Franklin in Philadelphia were selected and trained at the workplace for their highly skilled work. Training and manpower experts estimate that in the past about 60% of our workers just "picked-up" the skills (either on the job or off the job, without formal training) needed to do their current jobs.

Formal on-the-job training (OJT) is provided by many employers in cooperation with the U. S. Department of Labor. Most OJT in American industry is sponsored by private business firms, but OJT training is supported by the Manpower Development and Training Act (MDTA). This act creates training programs that are a partnership between cooperating employers and the federal government. In 1966, MDTA authorized OJT for about 95,000 workers (three out of four were men). Two-thirds of these OJT trainees were being prepared for skilled or semiskilled blue-collar occupations.

The MDTA also finances other training programs aimed primarily at unemployed persons who do not have the skills needed to get today's jobs. These programs are operated by public or private training institutions with supervision from the vocational education agencies of the state government. In the first four years of these programs -- 1962 through 1966 -- over 265,000 workers had completed their training. Men received training in such occupations as automotive mechanic, baker's apprentice, printing type-setter, and electrical appliance serviceman. Women -- who make up 40% of trainees -- were being prepared to work in such occupations as key-punch operator, psychiatric aide, receptionist, and X-ray technician.

* * *

Questions: Please check the correct answer.

1. Occupational training on the job has almost died out in the United States. True____ False____.

2. The Manpower Development and Training Act supports two different types of training programs: OJT and Institutional. True____ False____.

* * *

Apprenticeship programs are available for young men and women to learn the skills they need for specific occupations such as cosmetologist, book binder, dental technician, plumber, carpenter, and tool and die maker. What are apprenticeship programs? They are formalized on-the-job training for learning skilled crafts, usually sponsored by labor unions, employers, and the federal, state, and local governments. (About 8,000 workers in Ohio and 260,000 in the nation are in apprenticeship programs.) You can learn approximately 350 different skilled trades through apprenticeships. Most of these trades are in the construction, printing, and metal-working industries. The training of an apprentice involves learning skills on the job, learning a wide range of skills over a period of two years or more, training under a written agreement with an employer and usually a labor union, and going to job-related classes at a school. Requirements for apprenticeship training vary among states and occupations. The basic qualification for this type of training is that the apprentice be capable of learning the skills necessary to become a journeyman (for example, to become a journeyman carpenter, plumber, electrician). Question: What types of apprenticeship training are available in your community?

* * *

The programs we have described above reflect a growing concern in our nation with the "manpower revolution" taking place in our economy and the need for workers to develop new and better skills. These skills are necessary to perform the jobs being created by the process of technological change and economic growth. In response to these manpower needs, the federal government passed the Manpower Development and Training Act in 1962. This was the start of a new "national manpower policy" designed to increase the investment in human resources and develop the occupational skills needed for the economy of the 1970's and beyond.

* * * * * * * * * *

Today's Lesson in Brief

There are many different educational and training programs available to help you learn the skills needed for tomorrow's jobs. Vocational education programs -- some of which involve actual work experience -- are available in many high schools. Colleges, universities, junior colleges, and public and private technical, business, and trade schools offer many different programs for learning work-related skills. On-the-job training is provided by many employers. The federal and state governments sponsor MDTA training programs. Apprentice programs are also available to learn skilled trades. Regardless of what occupation you are interested in, there usually will be a variety of different education and training programs you can enroll in to obtain the skills needed to qualify for employment.

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## Education: An Investment in Human Resources

One of the most important economic discoveries of the 1960's is that education and other forms of "investment in human resources" provide vast benefits to the economy as a whole and to individual workers. Research and economic studies have shown that manpower can be made more productive by "investing" in a worker's knowledge and skills -- sometimes called his "human capital" -- in the same way that the economy gains from investments in nonhuman capital such as machines, buildings, and equipment. Economists have estimated that 23% of our recent national economic growth is the direct result of improved education of the work force.

* * * * * * * * * *

Today's lesson carries us right to the very frontiers of economic research. Our subject -- Human Resources -- is one of the newest and most exciting fields in the science of economics. The study of human resources puts man and manpower at the very center of our new theory of production and economic growth. In this sense it can be said that man is replacing the machine in economic theory -- in contrast to what many writers on automation and cybernation have said about the machine replacing man on the production line!

* * *

Do you remember our lesson on Adam Smith -- "the father of economic science" -- dealing with the specialization of labor? Writing in the late 1700's, Smith pointed out that the division of labor helped to increase productivity by improving manpower efficiency and also by making it possible to develop specialized machines. Smith and other economists who followed him, created a theory of economic growth that placed much emphasis on investment to increase the supply of capital equipment. For nearly 200 years -- until the 1960's -- most economists believed that investment in nonhuman capital (such as machines, factory buildings, railroads, and so forth) was the best way for business to make profits and also promote economic growth (higher GNP, year after year) for the nation. In order for us to understand the new theories of investment in human resources, it will help to study the older theories of investment in nonhuman resources.

Let's begin with the term "investment" itself. (Earlier in the course you learned that Investment was one of the four major sub-totals of Gross National Product: "spending by business firms to buy new equipment and buildings".) Investment is the use of resources (manpower, natural resources, and previously-produced capital goods) to produce capital goods that, in turn, can be used in further production. We measure the amount of investment that takes place by counting the dollars that are spent to purchase newly-produced capital goods. There are two very important economic results of investment: money is spent to pay for the production of

new capital goods; and the quantity of capital goods in existence increases. Investors (individuals, business firms, or government agencies) are willing to spend money to obtain capital goods because they expect to receive a financial return on their investment. (This return is sometimes called a "payoff".) Suppose a corporation invests $100,000 in a new machine that will produce goods that can be sold for $30,000 a year for 10 years (total value: $300,000). Then the machine is worn out and has to be junked. The average return or payoff from the machine (above the cost of the machine) is $20,000 per year. This is a 20% annual rate of return on the original investment. (Note: $20,000 is 20% of the original investment of $100,000.)

* * *

Question: Would you say that the corporation made a "good investment" when it bought the particular machine in the example above? Explain your answer.

* * *

Some corporations get returns on investment as high as 20% or 30% a year. (In 1966, Avon Products made 37% after taxes -- profits of $55 million; General Motors Corporation in 1965 got a 25.8% rate of return -- more than two billion dollars of profits after taxes). The average rate of return on investment for all business firms, however, is closer to 10% per year. Question: How many years would it take General Motors to earn enough profits, after taxes, to replace its entire capital investment?

* * *

Now let's apply the concepts of investment, capital, and rates of return to human resources. First of all, we can note an analogy (similarity) between investment in nonhuman capital and investment in human resources. Manpower, materials, and machines can be employed to produce buildings, equipment, and new machines. When money is spent to hire workers and to buy materials and equipment, this is an investment. When money is received from the sale of the goods and services that are made with the new capital goods, this is a return on investment (called a "payoff"). In the case of education, we know that it takes manpower (teachers), natural resources (land, fuel, electricity) and capital goods (school buildings, books, pencils, paper) to produce educational services. Money is spent -- mostly by governmental units in the case of public education -- to employ the inputs that are used for "producing" educated men and women. This is an investment in human resources. When these men and women enter the work force and begin using their manpower to help produce goods and services, there is a return on the investment that was made in their education. This return on investment in education comes in the form of personal earnings and also shows up in the increased production of our economy.

* * *

What is the payoff from education in terms of increased output for the ECONOMY AS A WHOLE? According to one well-known authority, improvements in the quality of the labor force contributed 23% of the total growth of national production in recent years. (See THE SOURCES OF ECONOMIC GROWTH

IN THE UNITED STATES, by Edward F. Denison, Committee for Economic Development, January 1962, p. 267). This contribution of 23% was the direct result of workers having more years of schooling than members of the labor force had before the 1930's.

What is the payoff from education in terms of increased earnings for the INDIVIDUAL WORKER? You can check back to lesson #28 -- "What's In It for Me?" -- and review the data on lifetime earnings. Workers who complete from one to three years of high school can expect to earn $69,000 more than men who complete less than eight years of schooling. High school graduates earn $35,000 more than workers who dropped out before graduating. Workers who complete five years or more of college (the equivalent of a Master's degree or more) earn nearly twice as much income as high school graduates who do not go on to college.

* * *

Discussion Question: "When you add more skills to your personal skill bank, you are really making an investment in human capital." Do you agree with this statement? Explain your answer.

* * *

From the viewpoint of the economy as a whole, which is a better investment -- using resources to produce more nonhuman capital, or investing resources in human resources? Of course, you know very well that it isn't a simple question of either-or. We must invest in both kinds of resources, human and nonhuman. The important question is: How shall we balance our investment among nonhuman capital and human resources?

There are many factors to consider in arriving at an answer. Investments in human resources will affect the man or woman not only as a worker, but also as a citizen, a consumer, and a person. There are differences in who gets the payoff from investments in machines and investments in people. (A corporation can own a machine and keep all the money that it earns. But a corporation can't own a worker, and therefore may not be able to capture the total returns from investing in the education and training of its employees.) However, putting aside these complications for now, let's consider one economic fact that might be helpful in choosing a wise balance between investment in nonhuman capital and investment in human resources. We can look at relative rates of return on the two kinds of investment.

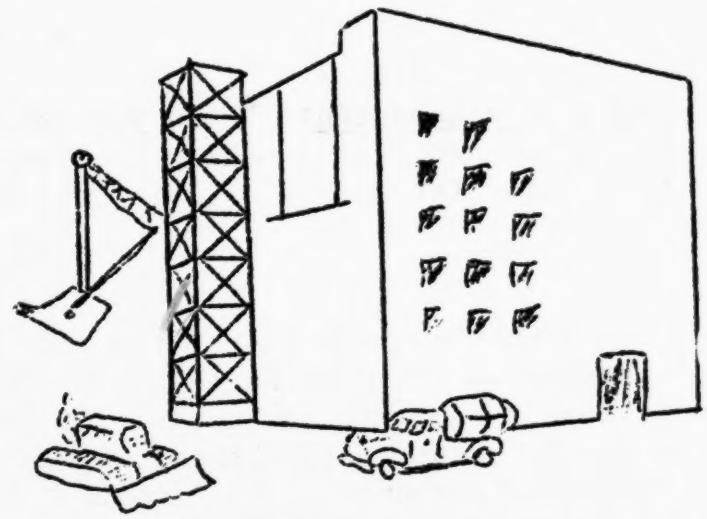
Economists who have studied investment in schooling in the United States estimate that the rates of return for the eighth year of school are approximately 30% -- approximately three times as high as average returns on nonhuman capital. Rates of return on the fourth year of high school (leading to a diploma) are about 15%. And rates of return on investments in the fourth year of college also are 15%. These rates of return -- based on estimates as measured by earnings -- suggest that it might be wise to give more emphasis to investments in human resources than to machinery and equipment in the years ahead. This is exactly what many economists and manpower experts are recommending today. (Caution: The estimates we have

reported are still being checked, and are subject to change. However, the tentative judgment clearly is that <u>investment in human resources</u> is a wise use of economic resources and offers the promise of big payoffs, both for the individual and for the economy as a whole.)

* * *

<u>Discussion Question</u>: Investments have to be financed (that is, somebody has to pay for resources that are used). Can you think of some problems that might make it harder to finance investments in <u>human</u> resources than investments in <u>nonhuman</u> capital? (HINT: Would your parents rather "invest" $500 in shares of Tenpenny Nail Company stocks to provide funds for the company to build a new plant, or vote to raise school taxes by $50 per year for the next 10 years? Why?

HUMAN RESOURCES



NONHUMAN CAPITAL

* * * * * * * * * *

## Today's Lesson in Brief

During the 1960's economists began to pay increased attention to the economic value of investments in human resources. Early research findings indicate that 23% of our recent national economic growth is the direct result of <u>improved education</u> of the work force. Statistics also show that workers with more "human capital" -- more education, knowledge, skills, and other productive abilities -- receive higher earnings than workers having less education. Rates of return on investment in human resources (as indicated by years of schooling) are estimated to be <u>higher</u> than average rates of return on many investments in nonhuman capital such as machinery and equipment.

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## Portrait of the Unemployed

You learned that there are many thousands of unemployed workers in the U. S. economy. But what do you know about the personal characteristics of these unemployed workers? Are they men or women? Young or old? White or nonwhite? Skilled or unskilled? High School graduates or dropouts? Information about the unemployed may be of general interest to you as a citizen and also prove useful in making personal occupational decisions.

* * * * * * * * * *

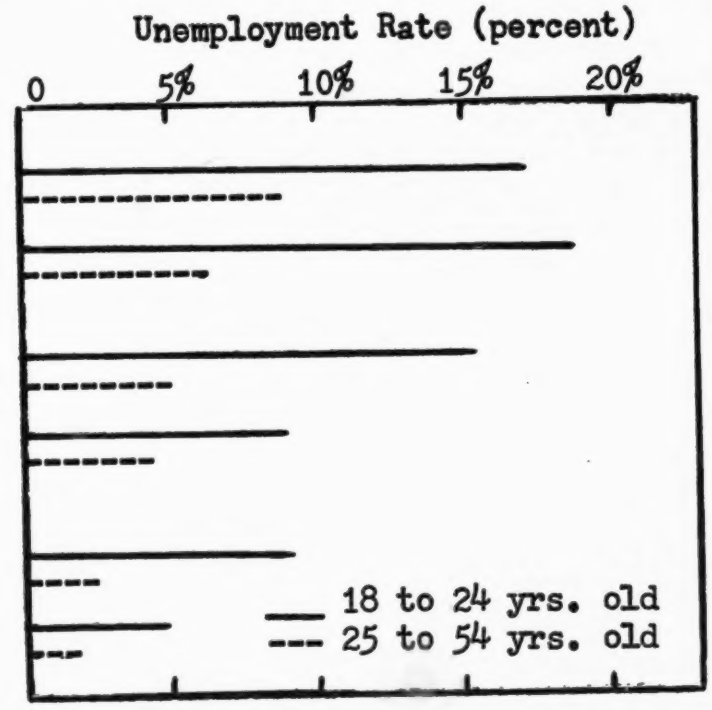
During the early 1960's the number of unemployed workers in the American economy averaged more than 4,000,000 men and women each year. Between 1958 and 1964, the unemployment rate (number of unemployed workers as a percent of the total labor force) was always above 5%. Even when our economy is working very well -- close to full capacity -- we still have about two million unemployed workers. (This number of jobless workers is sometimes called "frictional unemployment", a topic that is discussed in another lesson.)

Who are these jobless workers? What particular characteristics seem to "select" these men and women for unemployment? What kinds of workers face the highest risks of unemployment?

For answers to these questions, we can turn to the abundance of manpower statistics compiled by the U. S. Department of Labor and the cooperating state government agencies responsible for "employment security". There are data, for example, showing the personal characteristics of the unemployed and rates of unemployment for men and women in various occupations.

Chart I on unemployment and schooling (see next page) shows that about 18% of all young workers (age 18-24) with less than eight years of schooling were unemployed in March of 1964. The jobless rate for older workers (age 25-54) with the same amount of schooling (less than 8 years) was 8%.

Chart I. UNEMPLOYMENT AND SCHOOLING, MARCH 1964




SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, p. 18.

Questions: Does this chart show any connection between unemployment and schooling? If so, how do you explain the relationship?

* * *

Table I reports unemployment rates by age, sex, and color for a recent year. It shows, for example, that in 1963, one out of every 17 white females in the labor force was unemployed (5.8%); whereas one out of every three nonwhite females 19 years and younger was unemployed (33.1%).

Table I. UNEMPLOYMENT RATES BY AGE, SEX, AND COLOR, 1963

| Sex and Age Group | White (%) | Nonwhite (%) |
|---|---|---|
| MALE | 4.7% | 10.6% |
| 19 and younger | 14.2 | 25.4 |
| 20-24 years | 7.8 | 15.6 |
| 25-34 years | 3.9 | 9.5 |
| 35-44 years | 2.9 | 8.0 |
| 45-54 years | 3.3 | 7.1 |
| 55 and over | 4.1 | 8.0 |
| FEMALE | 5.8% ✓ | 11.3% |
| 19 and younger | 13.6 | 33.1 ✓ |
| 20-24 years | 7.4 | 18.8 |
| 25-34 years | 5.8 | 11.7 |
| 35-44 years | 4.6 | 8.2 |
| 45-54 years | 3.9 | 6.1 |
| 55 and over | 3.4 | 4.6 |

SOURCE: S. Wolfbein, Employment, Unemployment & Public Policy, 1965, p. 45.

Questions: What definite patterns show up in the data in Table I? Is there any special significance in the unemployment rates that are boxed?

* * *

You can also study the characteristics of the unemployed by looking at Table II showing the unemployment rates of different occupational groups. These statistics indicate, for example, that in 1955 only one out of every 100 professional and technical workers was unemployed (1.0%), while the jobless rate for general laborers was one out of every ten (10.2%).

Table II. UNEMPLOYMENT RATE BY MAJOR OCCUPATION GROUPS, SELECTED YEARS, 1947-66 (Percent Unemployed)

| Major Occupation Group | 1947 | 1950 | 1955 | 1960 | 1966 |
|---|---|---|---|---|---|
| TOTAL, ALL GROUPS | 3.6% | 5.0% | 4.0% | 5.6% | 3.9% |
| Professional and technical workers | 1.9 | 2.2 | 1.0 | 1.7 | 1.3 |
| Farmers and farm managers | .2 | .3 | .4 | .3 | .4 |
| Managers, officials, and owners (except farm) | 1.2 | 1.6 | .9 | 1.4 | 1.0 |
| Clerical workers | 2.9 | 3.4 | 2.6 | 3.8 | 2.8 |
| Sales workers | 2.6 | 4.0 | 2.4 | 3.7 | 2.7 |
| Craftsmen and foremen | 3.8 | 5.6 | 4.0 | 5.3 | 2.8 |
| Operatives | 5.1 | 6.8 | 5.7 | 8.0 | 4.3 |
| Private household workers | 3.4 | 5.6 | 4.1 | 4.9 | 3.6 |
| Service workers (except private household) | 4.7 | 6.8 | 5.8 | 6.0 | 4.8 |
| Farm laborers and foremen | 2.7 | 5.0 | 3.7 | 5.2 | 4.1 |
| Laborers (except farm and mine) | 7.5 | 11.7 | 10.2 | 12.5 | 7.3 |

SOURCE: S. Wolfbein, Employment and Unemployment in the United States, 1964, p. 305 and U. S. President & U. S. Department of Labor, Manpower Report of the President 1967, April 1967, p. 217.

Question: Do these statistics suggest that there is any relationship between the rate of unemployment and the level of skill? What is this relationship?

Perhaps you can see the full meaning of all the data we have presented if you would look at it again and answer the following question:

Which of the following types of persons is <u>most</u> likely to be unemployed? (Put a check (√) in the blank next to the right answer.)

| | | |
|---|---|---|
| ____ young worker | or | ____ old worker |
| ____ dropout | or | ____ high school graduate |
| ____ white worker | or | ____ negro worker |
| ____ female white worker | or | ____ female negro worker |
| ____ young female negro worker | or | ____ young female white worker |
| ____ skilled blue-collar worker | or | ____ unskilled blue-collar worker |

* * *

The portrait of the unemployed which you have examined suggests that the following types of workers are much more likely to be found among the unemployed: the risks of unemployment are highest for the <u>unskilled</u>, the <u>young</u>, the <u>dropout</u>, and the <u>nonwhite</u>.

A simple way to picture the barriers to employment faced by the workers who have these personal characteristics, is to remember that these workers have hurdles <u>twice</u> as high to clear in order to get and keep a job. Unemployment rates for each of the four groups listed above on the average have been <u>twice</u> as high as those of their counterparts. These workers have "double trouble" in getting and keeping a job.

* * * * * * * * * *

## <u>Today's Lesson in Brief</u>

Who are the unemployed -- the "casualties of the manpower revolution"? They tend to be the <u>uneducated</u>, the <u>unskilled</u>, and those who are <u>discriminated against</u>. (Often the same people are included in all of these categories.) The uneducated lack the primary communication, computation, and other skills to obtain employment. The unskilled lack the know-how and work experience required by a changing technology. Others are discriminated against because of their age, color, or sex. Increased <u>investment in human resources</u> and more equal <u>opportunities</u> in the manpower market can help improve the employability and earnings of men and women having these "high-risk" characteristics.

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## Men and Women Without Jobs

The total demand for labor and the total supply of labor are never exactly equal. Supply and demand for specific types of workers do not balance. In the giant U. S. economy there will always be some unemployed men and women in the labor force. But how many people in the labor force are unemployed--in total?--as a percentage of the total labor force? What are the causes of unemployment? Is unemployment a major problem in the U. S. economy? Answers to these questions are important because they will help you understand the dimensions of unemployment and the policies and programs designed to deal with the problem.

* * * * * * * * * *

Do we have an unemployment problem in the United States? Let's examine some unemployment data for the last two decades (1947-1966) and see what the facts are.

The total number of people in the civilian labor force (16 years and over) who were unemployed during these two decades ranged from a high of 5 million in 1961 to a low of under 2 million in 1953. In over half the years between 1947-1966, more than 3 million men and women in our labor force were unemployed. The annual unemployment rate (number unemployed as a percent of the civilian labor force) during the period 1947-1966 ranged from a high of 6.7% in 1961 to a low of 2.9% in 1953. Except for five post-war and Korean War years (1947-48 and 1951-53) the unemployment rate was never below 4% until 1966. For eight straight years (1958-65) the unemployment rate was 5% or higher.

In 1933, the worst year of the Great Depression, the number of unemployed workers reached 13 million, or 25% of the labor force. During the height of World War II -- 1944 -- only 670,000 thousand workers were jobless and the unemployment rate dropped to an all-time low of 1.2%.

Questions

1. Do the figures above suggest to you that unemployment has been a serious problem in the United States?

2. Why do you think our unemployment rate reached a high point during an economic depression and a low point during a war?

* * *

Now let's examine the causes of unemployment. Why are some workers jobless, even though they are able and willing to work? Here is what a recent survey of unemployed workers revealed:

-- A coalminer in his early thirties was unemployed as a result of the closing of one of the few remaining mines in his area.

-- A single woman in her fifties, out of a job for two months because the company she worked for merged with another firm.

-- The former owner of a small retail business which had failed, looking for work as a salesman in his field.

-- A 47-year-old electrical engineer, with more than 20 years of work experience laid off (involuntary separation from employment through no fault of worker for an indefinite period of time) by a West Coast plant with declining orders from the U. S. Defense Department.

-- A teen-age negro, just arrived in a large northern city from a rural area, who had signed up with the local office of the state employment service looking for unskilled work.

-- A 54-year-old family man given a layoff notice a month earlier by a medium-sized machine-tool plant, hopeful of being called back to work any day.

There are several different ways to classify the causes of unemployment. The classification system most frequently used includes four types of unemployment: Frictional, Seasonal, Cyclical, and Structural unemployment. We will define each one of these types of unemployment and indicate its importance in the total unemployment picture.

The term "frictional" unemployment describes the joblessness caused by the imperfect working of the manpower market itself. Even if the total demand for labor is high, it takes a while before workers show up at the right time, in the right place, and with the right skills needed to fill the available jobs. This type of short-term unemployment is caused by the normal "frictions" that exist in a free manpower market. In the typical case of this kind of unemployment, some time lag is almost bound to occur before the worker and the job get together. Part of this unemployment is unavoidable in an economy as big and complicated as ours.

Let's examine some of the evidence for the presence of frictional unemployment. You will recall that even during the height of World War II there was an unemployment rate of 1.2%. Since 1929, there has been only one other year -- the Korean War year of 1953 -- when the unemployment rate was below 3%. We might conclude then that something in the range of 1% to 3% of our unemployment rate must be frictional in nature since it is the lower limit even during times when there is the greatest demand for workers.

A second type of joblessness is seasonal unemployment which is seen in the high unemployment rates for farm and construction workers in the winter and the low rates in the summer; the low unemployment rate in retail trade before Christmas and Easter; and the high unemployment rate in the automobile industry during the late summer and early fall when model changeover time arises. Unemployment among the various different types of workers in industries affected by seasonal forces usually tend to be for a short period of time. However, where the seasonal period is long and adult males make up the bulk of the work force (as in the construction industry) seasonal unemployment can account for a large part of the unemployment picture in the industry.

The importance of seasonal unemployment for workers in different industries is shown by the data in Table I. This table points out, for instance, that 43% of all unemployment among wage and salary workers in the construction industry in 1957 was of a seasonal nature. About one-fourth (26%) of total unemployment in all industries combined was caused by seasonal factors.

Table I. SEASONAL UNEMPLOYMENT BY INDUSTRY*

| Industry | Seasonal as % of Total Unemployment in the industry |
|---|---|
| Agriculture | 41% |
| Construction | 43 |
| Manufacturing | 30 |
| Trade | 14 |
| Transportation | 8 |
| Service | 29 |
| TOTAL SEASONAL UNEMPLOYMENT | 26% |

*Wage and salary workers, 1957.
SOURCE: S. Wolfbein, Employment and Unemployment in the United States, 1964, p. 293.

T-1. Why does the amount of seasonal unemployment vary so greatly among the different industries?

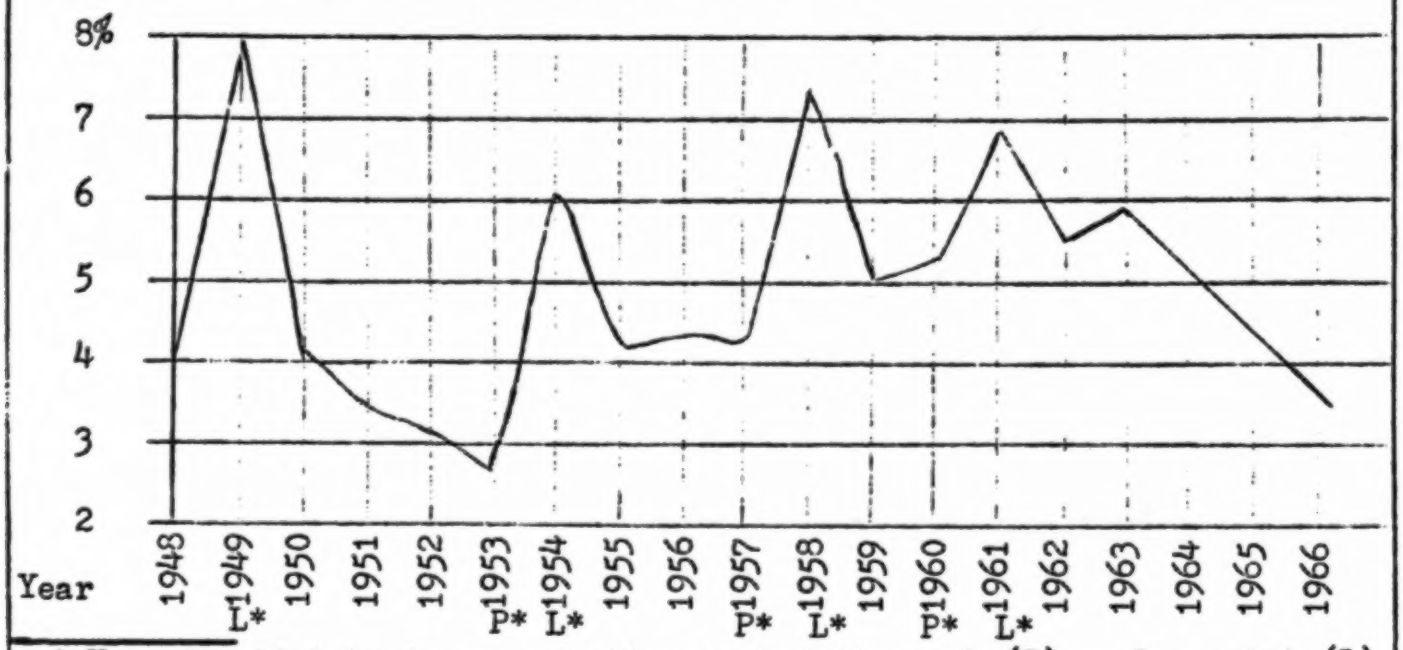
T-2. How might seasonal unemployment be reduced in some industries? (Example: In Canada, the government finances winter construction projects.)

* * *

As the name implies, cyclical unemployment is caused by periodic cycles (changes or fluctuations) in the total level of economic activity. When the total demand for the economy's goods and services declines, so does the demand for workers to produce those goods and services. Thus, the amount of unemployment increases when the business cycle is on the downswing (and vice versa). A "business cycle" is a way of picturing total business activity over a period of time. A cycle has five phases of business activity:

expansion or prosperity; peak or "boom"; recession or contraction; trough or low point; and recovery leading once again to prosperity. When the peak of business activity is passed, and the business cycle is on its downward path, the unemployment rate rises quite sharply. Unemployment reaches its height near the low point of the business cycle and stays high for several months after business activity begins to increase again. Chart I illustrates the nature of cyclical unemployment by showing the unemployment rate for all civilian workers in our labor force since 1948. (The figures in this chart have been "seasonally adjusted," so that seasonal factors are eliminated from the cyclical data. However, frictional and structural factors are still present.) The chart shows, for example, that in January 1953 -- when the business cycle was at its peak (note the P) -- the unemployment rate for all civilian workers in the labor force was about 2.7%. By January 1954, however, unemployment had risen to 6.1%-- an increase of over 100% in a single year!

Chart I. UNEMPLOYMENT RATES, 1948-1966 (Seasonally Adjusted)**




* Year in which business activity reached its peak (P) or low point (L) during a particular business cycle.

**Civilian workers, 14 years and over.

SOURCE: S. Wolfbein, Employment & Unemployment in the United States, 1964, p. 295. U. S. Department of Labor, BLS, Monthly Labor Review, October, 1966, p. 1177, and February 1967, p. 81.

C-1. Does this chart suggest any relationship between the peaks and low points of the business cycle, and the unemployment rate?

C-2. What were the unemployment rates at low points of the cycle during the period 1955-1962? (For example, 1957 is 4.3%.)

C-3. How would you explain the fact that the low points of the unemployment rate between 1955-1963 keep getting higher?

* * *

Structural unemployment is joblessness brought about by deepseated structural changes in the economy -- changes in the demand for and supply of workers. The impact of automation and technological change, the changing geographical location of American industry, the exhaustion of natural resources, major changes in the size and composition of the population, and changes in the types of workers needed and the industries needing them -- all these are examples of structural changes in the economy that can cause unemployment, especially long-term joblessness. Because of the fundamental and drastic nature of many of the changes, structural unemployment is the most difficult type to deal with.

Technological advance and automation provide a dramatic illustration of what is happening to jobs in our changing economy. It is estimated that every year 2.3 million jobs are affected by technological change. During the decade of the 1960's about 24 million jobs will either be altered or eliminated by technology.

Some well-known examples of structural changes which have created unemployment problems are: the decline in the mining of both bituminous (soft) and anthracite (hard) coal in Pennsylvania, West Virginia, and Kentucky; the shift from steam to diesel railroad locomotives; the exhaustion of high-grade iron ore deposits in the Mesabi range in Minnesota; the geographical shift of much of the cotton textile manufacturing industry from New England to the Southeastern part of the United States; increasing productivity in agriculture (making it possible for fewer farmers to produce more output of farm products); installation of automated equipment in the automobile industry; reduced demand for unskilled labor; and the shift from being predominately a nation of goods-producers to that of being basically service-producers.

* * *

Discussion Question: Explain the effects on employment for each of the examples above. (HINT: the shift from steam locomotives to diesel engines brought about a decline in the demand for coal, which in turn affected ...???)

* * *

What have we learned from our discussion of unemployment? We found that an unemployment problem does exist even in our prosperous American economy. In 1966 when our output of goods and services rose to an all-time high of $740 billion, we still had almost 3,000,000 people unemployed -- a rate of about 4%. Within your parents' memories, the unemployment rate was as high as 25%. In World War II unemployment declined to 1.2%.

We examined some of the causes of unemployment, classifying them as Frictional, Seasonal, Cyclical and Structural. We found that frictional unemployment causes from 1% to 3% of our labor force to be unemployed, and is perhaps not as serious as some other unemployment problems since it is usually a short-time situation. Seasonal unemployment accounts for about one-quarter of the total amount of unemployment, varying a great deal among industries. We also saw that unemployment is caused by downturns in the level of business activity and total market demand (spending) -- the business cycle. It was seen that unemployment rates were highest when business activity was at its low point during the cycle, and vice versa. Structural unemployment was found to be the most serious form of joblessness; it tends to be more stubborn and longer lasting.

* * * * * * * * * *

## Today's Lesson in Brief

Unemployment is a waste of the productive capacity of part of our labor force. It means that manpower is available but isn't being used in production. Frictional and seasonal factors account for a fairly stable amount of unemployment in our economy (about 3% of the labor force). Cyclical unemployment is caused by insufficient market demand (spending) in the economy. Structural unemployment is caused by fundamental changes in the economy that affect supply and demand in the manpower market. In general, cyclical and structural unemployment vary the most over the years and are the most serious kinds of unemployment because they last longer than frictional or seasonal.

Technological change helps to increase productivity but also produces "casualties" in the form of displaced workers, who may become temporarily or permanently unemployed.

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## Help for the Unemployed

During the early 1960's the number of unemployed workers in the American economy averaged about 4,000,000 each year. What policies and programs have been adopted to deal with the problem of unemployment? Knowing what business firms, labor unions, federal-state-local governments are doing to assist unemployed workers will help you evaluate these programs as a citizen and also acquaint you with the types of help you might someday need if you become a jobless worker.

* * * * * * * * * *

Public policies designed to deal with unemployment problems include programs to provide additional jobs in the economy; programs of manpower training; programs to help workers find jobs; and programs to provide income for workers who are temporarily unemployed.

* * *

First, let's look at a pair of "tools" that the federal government has available to deal with unemployment, especially cyclical unemployment. The use of these tools -- taxing and spending policies that affect the TOTAL DEMAND for goods and services in our economy -- is called "fiscal policy". An increase in demand (total spending) for additional output will bring about some increase in the total demand for workers to produce the additional goods and services. Do you recall our formula for counting the nation's total output of goods and services? It was this: C + I + G + Xn = GNP, where C, I, G, Xn represent the four groups of buyers of our nation's output. It is the spending of consumers, business firms, government, and foreigners that determines the total amount of GNP produced by the economy. This formula will be helpful in understanding how the tools of fiscal policy are used to combat unemployment.

The amount of income (and spending-power) of three groups of buyers (not foreigners) can be greatly influenced by the spending and taxing policies of the federal government. For example, the government can reduce corporate taxes in order to stimulate investment purchases of capital equipment by business firms. It can also reduce the rate of the personal income tax to put more purchasing power into the hands of consumers. The federal government can also increase the size of its own expenditures, and also the funds it gives to state and local governments for such items as schools and highways.

All of these policies have the effect of making more income available to consumers, businesses, and government -- the buyers of 95% of our output -- who in turn tend to spend the largest share of this additional income. When they buy additional amounts of output, these three groups increase the demand on business firms to supply the additional output. Business firms in turn will hire additional workers to help produce the extra output that is demanded. The total number of jobs in the economy is increased. Additional workers will be hired, and this reduces the amount of unemployment.

Question: What are some of the limitations of fiscal policy as a tool to combat unemployment? (HINT: Do business firms and consumers always spend the extra money they have on hand?)

* * *

The federal and state governments have also developed special programs to provide additional jobs for unemployed workers. For example, the federal government has several programs designed to deal with structural unemployment by moving workers to where the jobs are, bringing jobs to where the workers are, and giving the workers the skills needed to get jobs. You will recall that solving the structural unemployment problem involves matching workers (who are left behind because of geographic, occupational, and industrial changes) with new job opportunities. Approaches used by the federal government to deal with this problem include trying to bring new job opportunities to the unemployed -- for example, by encouraging plant location in depressed areas as provided in the Public Works and Economic Development Act of 1965. This law helps depressed areas having high unemployment rates to get the facilities needed to attract business firms to the area. The Manpower Development and Training Act of 1962 helps provide workers with skills required to get jobs, and pays allowances to the trainees. In addition, the federal and state governments have programs to help workers find jobs that already exist. For example, the Public Employment Service, which we have discussed before, obtains information on job vacancies and then provides counseling, testing, and placement services for unemployed workers who request its help.

To summarize, there are government policies and programs designed to increase the total number of jobs in the economy as a whole (through fiscal policy); to provide extra jobs in particular depressed areas; to train workers so they can qualify for newer job opportunities; and to provide information to help workers find existing jobs.

Question: Which of these four approaches to helping the unemployed do you think is most helpful to the individual worker? To solving the nation's unemployment problem? Why?

* * *

Now let's consider another side of the unemployment problem. What happens when jobs can't be found? What do workers live on when they are unemployed? This is where unemployment insurance enters the picture. Three-quarters of all the wage and salary workers in the United States are covered by Unemployment Insurance (sometimes called Unemployment Compensation). This joint federal-state program (established in 1935 under the Social Security Act) provides payments to eligible unemployed persons for specified periods of time. State-administered funds, obtained through payroll taxes paid by employers, are the source of revenue for these programs. The levels and duration of the benefits paid, and the tax rates paid by employers, vary among the states. Unemployment insurance (UI) plays a key role in aiding the unemployed. It provides more income to more unemployed persons than all other programs of aid combined. Total benefits averaged about $3 billion a year for the nation as a whole in the early 1960's. Weekly benefits average about $40 for each eligible worker. UI supplies the unemployed with purchasing power when they need it most and helps carry them over while they are seeking new employment. This extra purchasing power also helps increase the level of total demand in the overall economy.

Discussion Question: Why is Unemployment Insurance so important to the unemployed worker? To the economy as a whole?

* * *

The programs created by private industry for dealing with unemployment are characterized by fitting the benefits to particular situations and pioneering in new directions, rather than along established lines of public programs. We will describe three of these programs: Supplementary Unemployment Benefits, Severance Pay, and Early Pensions.

A Supplementary Unemployment Benefit plan (SUB), as its name indicates, is one that supplements or adds to the benefits paid by the public employment insurance programs. These SUB programs came into being as a result of negotiations between labor unions and management. Leading unions such as the United Auto Workers and the United Steel Workers felt that the amounts and duration of benefits under public UI programs were not adequate. They wanted their members to receive additional compensation when they are unemployed and persuaded the companies to set up a SUB program. As of 1964, about 2½ million workers were covered by SUB plans, in some cases paying benefits of $50 or more per week in addition to regular Unemployment Insurance benefits.

Severance pay consists of one lump-sum payment made by an employer to an employee when his job is terminated by the company. Because the worker is considered to have a kind of "property right" in his job, the benefit is paid to compensate him for the loss of that property right. By the end of 1963, about 35% of all workers under union collective bargaining agreements were covered by such plans. Benefits under severance pay agreements differ greatly from firm to firm, paying from $50 or $100 up to $1,000 or more, depending on years of service to the company.

Some private business firms, often with prodding from labor unions, have established private pension plans which allow workers to retire earlier than the usual retirement age of 65. This provision for early retirement is especially helpful to older workers who are laid off or lose their jobs, because they often have trouble finding another job. Usually, the early retiree is paid less than the full pension he would get if he retired at age 65. But when early retirement is not completely voluntary, some plans pay the full amount until the retiree becomes eligible for Social Security benefits. In recent years, because of the increasing number of jobs being eliminated by technological change, more labor contracts have contained this latter provision.

Discussion Question: What do you think are the strengths and weaknesses of these private programs for dealing with unemployment?

* * * * * * * * * *

## Today's Lesson in Brief

There are several different types of governmental and private programs for dealing with unemployment problems. Government programs have been developed to deal with both general and specific types of unemployment. These include: increasing the total number of jobs available throughout the economy (by using fiscal policy to increase total demand for goods and services); creating new job opportunities in particular areas; training or retraining the unemployed; supplying information on job openings; and providing unemployed workers with temporary income through Unemployment Insurance benefits while they look for a new job. Private programs are designed to deal with unemployment caused by the operation of specific firms and industries. These include such plans as supplementary unemployment benefits (SUB), severance pay, and early pensions.

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## Work: The Test Site of Human Relations

Work in our society usually involves group activity. It is very social in nature and will become even more so in the future. In a predominantly service-producing economy like ours, a worker's ability to get along with his employer, fellow employees, clients, or customers is extremely important. The workplace is becoming a test site for the worker's social skills, especially communication and group relations. Your employability in the manpower market will to a large extent depend on your human relations skills.

* * * * * * * * * *

Why is work today a group activity? One basic reason is because of the high degree of specialization and division of labor in our economy. No longer does one man alone produce all the food and other items that his family needs. Instead he helps produce some goods and services (perhaps only one small part of a TV set). He then depends on others to provide the rest of the goods and services that his family needs. In today's economy we are dependent on others, and others are dependent upon us. When we work together effectively on the job, we accomplish our goals, through joint efforts. (What happens when a worker fails to do his part of the job? The cost to the individual and to the group can be high. Example: Work interruptions on the assembly-line, reduced output, and defective goods.)

This interdependent relationship among workers suggests that you must be able to cooperate with other people in the work place -- you must have social skills. What are some of these social skills? They include the ability to get along with people, to accomplish group goals, to deal with people with understanding and compassion. ("Social skills" are basically the same skills we identified earlier as Communication and Group Organization skills.) Having or developing social skills is almost a must if you want to get and keep a job. Industrial relations studies show that more people lose their jobs because they can't get along with their co-workers and employers than for any other reason.

Since work today is a group activity, it can satisfy some of our needs for interpersonal relations. For reasons of economic efficiency (increased output) as well as noneconomic rewards (enjoyment from association with fellow workers) social skills are a necessity on the job.

The increasingly social nature of work in our economy is reflected in the manpower market. Interpersonal relationships are a very important part of the work in many of the occupations and industries in which employment is growing the fastest. (Examples: Technicians and their relationship to scientists and other professional people with whom they work; Nurses and their patients; the key relationship between Salesman and customer in the retail trade industry.) Today there are more workers employed in the production of services than in the production of goods. Producing services usually requires more social skill on the part of the worker than does the production of goods.

Questions:

1. What are some of your personality and character traits that will make it possible for you to have good interpersonal relations on the job?

2. Does the fact that work today is so social in nature mean that you have to be "one of the boys" on the job?

3. List some specific occupations and industries in which you think social skills are extremely important. Be prepared to discuss why these social skills are necessary for success.

* * *

The observation that work is social in nature and a source of need-satisfaction for the individual is supported by evidence gathered by industrial psychologists and sociologists. What does the following actual case study tell you about the social aspects of work?

CASE #1 "Waiting at the Gate"

"At a firm which retires its women workers at age 55 (on a generous pension) many of these women may be seen standing by the factory gates each evening waiting for their friends to come out. They continue to attend social events held by the firm, and when part-time work is available during the busy season, they are always ready and willing to work. As far as these women are concerned, the factory is a social center; earning money is not the main reason they work."

* * *

Another way we can illustrate the social nature of work is to show that worker morale is not totally dependent upon the physical conditions of the job. In fact, as the following case illustrates, the social aspects of the job are much more important to the workers than are the physical conditions in the plant.

CASE #2 "Happy Workers in the Slaughter-house"

"In a London slaughter-house where pigs were killed, there was a small room in which the internal organs were sorted and washed prior to using them for other purposes -- intestines for sausage skins, glands for chemical extracts, etc. The room was below ground level, dimly lit by artificial light, cold and damp. Its floors were covered with waste which smelled extremely unpleasant to an outsider. (It was a perfect example of what most people think they would not want in a work place.) Yet, in these far from ideal surroundings, six girls worked cheerfully -- laughing and singing throughout the day. The company doctor, new to the factory, visited this room and was shocked by the surroundings. He immediately recommended that the girls be replaced by men and transferred to other departments in the firm.

"But this well-meant recommendation brought such a storm of protest from the girls that it was withdrawn. What was wrong, the girls wanted to know, with the way they were doing their work? If the management was not satisfied with their work, why didn't they say so, and give the girls a chance to do something about it? These girls formed a happy work team and were on friendly terms with each other. They believed that they were doing a good job and they had a good supervisor who let them take their own time with the work and gave them a lot of praise. Meanwhile, in other departments in the same factory -- well-lit, well-heated, under the best physical conditions -- hundreds of other girls complained and grumbled about their jobs."

Questions: How do these two cases show that work is social in nature and a source of personal need satisfaction? Would you be "waiting at the gate" for the workers to come out? Would you be willing to work in the "small room" in the London slaughter-house? Why or why not?

* * *

Our next case is a report on a famous study that was made in the late 1920's. As you read this case and attempt to solve its "puzzle", keep in mind what you have learned from the two previous cases.

CASE #3 "The Hawthorne Experiment"

"The Hawthorne plant of the Western Electric Company near Chicago, Illinois, was the site of a famous industrial psychology experiment. The purpose of this experiment was to see what affect changes in wages, hours, and working conditions have on workers' output and productivity. Six girls (regular employees of the company) whose jobs involved assembling small telephone parts were the subjects of the experiment. For five years they worked under the observation of a scientist, doing their regular job in complete isolation from the rest of the plant. First, for about two months

they worked a 48-hour week, including Saturday, and turned out 2,400 parts. Then, for weeks at a time the conditions of the job -- the hours, working conditions, methods of payment -- were changed again and again. Each time a change occurred, the output of the girls was carefully recorded to see how each change affected their productivity.

"At the end of the five years, the girls had turned out hundreds of thousands of parts, and the psychologists had learned some important facts: When the girls were put on a piecework basis their output rose. That made sense, for their pay went up accordingly. They were given coffee breaks in the morning and afternoon, and their output went up again. 'Of course,' said the researchers, 'they went back to work rested and refreshed.' When coffee breaks were made longer, output continued to rise; and the psychologists began to look puzzled. They cut the working day to seven hours, the week to forty, then to thirty-five. And each time the weekly output was higher than ever! Had something gone wrong? What kept pushing the output up, above 2,400 units, no matter how many changes were made in hours, wages, working conditions?

"The researchers decided to start over again from the beginning. For three months the girls worked their original 48-hour week -- no piecework, no coffee breaks, no Saturday holiday. And they turned out 3,000 parts each week, a record for the company! The psychologists were now really puzzled. It took months to find the explanation to the amazing production record of the girls. And the answer, when it came, was a surprise to everyone."

Question: What do you suppose the answer was? Think about it, and be prepared to discuss your answer in class.

* * * * * * * * * *

## Today's Lesson in Brief

Work in our economy is highly social in nature. Work may fulfill many of the social needs a person has, such as the need for interpersonal relationships. Social skills -- communication and group organization -- are increasingly important in our service-producing economy. Workplaces are becoming human relations test grounds, and workers whose social skills measure up to the demands of our changing economy will achieve the greatest success and personal satisfaction.

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## Where the Jobs Are

Individual workers must adjust not only to industrial and occupational changes in the employment situation, but also to changes in the places where jobs are available. Information on the mobility (movement) of Americans will help you understand why so many American workers are on the move. Information on the geography of changes in employment opportunities can assist you in your occupational planning by suggesting where the jobs of tomorrow are most likely to be located.

* * * * * * * * * *

Each year, many Americans change their place of residence. Records kept by the federal government on the mobility of the population show that every year about one out of every five people in the United States moves. (However, only about 6% of the 40 million Americans who change their residence during the year move to a different county or state.)

You might ask why all these people are moving. There are many "personal" reasons such as health, but the most important reason why people move is economic opportunity -- including the search for a job, or a better job.

Who are the people that are "on the move"? Do they share any special characteristics with each other? One way to answer these questions is to check the records of people who have actually changed their residence in recent years and see if the ones who moved have certain characteristics and the ones who didn't move have other characteristics. Table I shows three important factors -- education, occupation, and race -- that may account for differences in mobility. For example the data reveal that 30% of all college-trained white workers changed residence at least once in the preceding five years, whereas only 10% of college-educated negroes made a move.

Table I. EDUCATION, OCCUPATION, AND MOBILITY FOR WHITE AND NEGRO WORKERS

| Personal Characteristics | Percent in each group who moved in 5 most recent years | |
|---|---|---|
| | White | Negro |
| EDUCATIONAL LEVEL: | | |
| 8 grades or less | 8% | 4% |
| 9-12 years | 15 | 11 |
| College | 30 | 10 |
| OCCUPATIONAL GROUP: | | |
| Professional, managerial | 31 | 5 |
| Laborers, service workers, operatives | 16 | 6 |
| Other | 13 | 8 |

SOURCE: Social Security Bulletin, "Negro-White Difference in Geographic Mobility," May, 1963, p. 13.

Questions: Which of the following conclusions can be supported by the data in Table I? (Put a check mark on the correct blank.)

I-1. Negro workers are more likely to move than white workers.
True_____ False_____.

I-2. The more education you have the less likely you are to move.
True_____ False_____.

I-3. Professional and managerial workers move more frequently than unskilled or semi-skilled workers. True_____ False_____.

For Discussion: Do you think that higher mobility rates indicate more freedom of job choice for a worker? What else might mobility rates reveal?

* * *

"Each year, 40 million Americans change their place of residence."

The geography of employment opportunities has shifted a great deal in the past and will continue to change in the future. Table II on the next page shows geographic employment trends since 1947. See how the statistics in this table can help you answer the questions that follow.

Table II. PERCENTAGE INCREASE IN NUMBER OF JOBS, BY GEOGRAPHICAL REGION, 1947-1964*

Increase in Jobs for Total U.S.: +33%

| | |
|---|---|
| **New England** | **+16%** |
| Maine | 8 |
| New Hampshire | 24 |
| Vermont | 13 |
| Massachusetts | 13 |
| Rhode Island | 1 |
| Connecticut | 28 |
| **Middle Atlantic** | **+14%** |
| New York | 15 |
| New Jersey | 33 |
| Pennsylvania | 3 |
| **South Atlantic** | **+54%** |
| Delaware | 53 |
| Maryland | 50 |
| District of Columbia | 25 |
| Virginia | 20 |
| West Virginia | -12 |
| North Carolina | 53 |
| South Carolina | 49 |
| Georgia | 56 |
| Florida | 139 |
| **East North Central** | **+21%** |
| Ohio | 19 |
| Indiana | 28 |
| Illinois | 16 |
| Michigan | 23 |
| Wisconsin | 29 |
| **West North Central** | **+30%** |
| Minnesota | 34 |
| Iowa | 24 |
| Missouri | 24 |
| North Dakota | 46 |
| South Dakota | 39 |
| Nebraska | 33 |
| Kansas | 36 |
| **East South Central** | **+42%** |
| Kentucky | 35 |
| Tennessee | 45 |
| Alabama | 37 |
| Mississippi | 58 |
| **West South Central** | **+54%** |
| Arkansas | 50 |
| Louisiana | 45 |
| Oklahoma | 43 |
| Texas | 60 |
| **Mountain** | **+80%** |
| Montana | 26 |
| Idaho | 37 |
| Wyoming | 35 |
| Colorado | 71 |
| New Mexico | 109 |
| Arizona | 166 |
| Utah | 65 |
| Nevada | 179 |
| **Pacific** | **+68%** |
| Washington | 27 |
| Oregon | 35 |
| California | 81 |

*Nonagricultural wage and salary employment, 48 continental states and District of Columbia.

SOURCE: S. Wolfbein, "The World of Work," The Encyclopedia of Careers and Vocational Guidance, 1967, p. 42.

Questions:

II-1. In what regions and what particular states are employment opportunities growing the fastest? The slowest?

II-2. What additional information do you want to know before rushing off to Nevada to get a job?

II-3. What is the importance of the boxed numbers?

II-4. How do you explain the wide differences in the growth of employment among the various states?

After looking at data on mobility and the location of new job opportunities, what conclusions can you draw? Here are four; please add some others:

-- The more schooling you have the more likely you are to move.

-- There have been some large shifts in the location of jobs.

-- Professional and managerial workers, who usually have the most formal education, are highly mobile.

-- Job opportunities have increased faster in the West and South since the end of World War II than in other parts of the country.

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* * *

Discussion Questions

1. "As every student of American history knows, we are an extraordinarily mobile population." Comment, giving examples from the 1700's and 1800's.

2. Are high mobility rates among workers a good thing for the economy? For our society?

* * * * * * * * * *

Today's Lesson in Brief

We are a nation on the move, with the better educated and the professional and managerial workers changing their residence more often than the other types of job holders. We also found that where the jobs are located is constantly changing. The geography of employment opportunities has shifted greatly in the past 20 years and will continue to change.

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## A Case Study: Where the Jobs Are in Ohio

Some of you will enter a manpower market in Ohio when you finish school. Knowing where the job opportunities will be in the 1970's can be useful to you in planning your career. This lesson shows what has happened to the occupational and industrial sources of jobs in Ohio since 1950, and provides a projection of the employment picture for 1970. Other states having a similar economic base -- strong in manufacturing and trade, with an important agricultural sector and a balanced mixture of other industries -- can be expected to have employment patterns very much like Ohio's. Many of the employment trends in Ohio (such as the increasing number of white-collar workers) will be found throughout the nation.

* * * * * * * * * *

Let's take a look at the employment trends in Ohio for various occupations, using data from the research division of Ohio's Bureau of Employment Services. Table I presents the occupational trends in employment for the period 1950 to 1970. The table shows, for example, that 302,000 service workers were employed in Ohio in 1950; and by 1960 there were 419,000 service workers. In 1960 there were 38.9% more service workers employed than in 1950. This was a rate of employment growth better than twice the state average (15.3%) for all occupational groups in Ohio between 1950 and 1960.

Table I. EMPLOYMENT IN OHIO BY OCCUPATION, 1950, 1960, AND 1970

| OCCUPATIONAL GROUP | NUMBER EMPLOYED (thousands) 1950 | 1960 | 1970 (projected) | CHANGE (percent) 1950 to 1960 | 1960 to 1970 |
|---|---|---|---|---|---|
| Professional and technical | 276 | 381 | 593 | 38.2% | 55.5% |
| Managerial | 265 | 361 | 451 | 36.2 | 24.9 |
| Clerical | 411 | 536 | 700 | 30.2 | 30.7 |
| Sales workers | 234 | 253 | 327 | 8.1 | 29.2 |
| WHITE-COLLAR | 1,187 | 1,531 | 2,071 | +29.0% | +35.3% |
| Craftsmen | 530 | 558 | 691 | 5.4 | 23.8 |
| Operatives | 740 | 766 | 906 | 3.6 | 18.2 |
| Laborers | 188 | 194 | 194 | 3.6 | 0.0 |
| BLUE-COLLAR | 1,457 | 1,519 | 1,791 | + 4.3% | +17.9% |
| SERVICE WORKERS | 302 | 419 | 528 | +38.9 | +26.0 |
| FARMERS, FARM WORKERS | 217 | 177 | 153 | -18.4 | -13.5 |
| TOTAL | 3,162 | 3,646 | 4,543 | +15.3% | +24.6% |

Note: Individual items may not add to total due to rounding.
SOURCE: Ohio Bureau of Unemployment Compensation, Division of Research and Statistics, Manpower in Ohio, 1960 to 1970, Rev. Ed., March 1963, pp. 37-38.

Questions from Table I:

TI-1. Using the data in Table I, please check the correct answer.

A. In 1970, more workers will be employed as Operatives than any other occupational group. True_____ False_____.

B. Farm workers are the only occupational group which will show a decrease in employment between 1950 and 1970. True____ False____.

C. Professional and technical workers are expected to have the highest rate of employment growth for the period 1960-1970. True_____ False_____.

D. The number of Laborers employed will increase between 1960 and 1970. True_____ False_____.

E. The rate of increase in employment for Operatives is greater than the average for all occupational groups for the period 1950-1960 and 1960-1970. True_____ False_____.

TI-2. In 1970, what three occupational groups will have the largest number of jobs?

TI-3. Which White-collar occupation shows the greatest employment for 1950? 1960? and 1970?

TI-4. Which Blue-collar occupation had the lowest rate of growth in employment between 1950 and 1960? Between 1960 and 1970?

* * *

Now let's turn to the industrial sources of employment in Ohio. Table II presents the recent employment record in Ohio in non-agricultural industries and gives a projection for 1970. Percentage changes in employment for each of the industrial groups are given for the period 1950-1960 and 1960-1970. Table II, for example, shows that 1 million, 289 thousands (1,289,000) wage and salary workers were employed in manufacturing industries in Ohio in 1970. It is estimated that by 1970 that there will be 1,629,000 workers employed in Ohio's manufacturing industries. This means that between 1960 and 1970 employment will increase in the manufacturing industries by 26.3%. This growth in employment is slightly less than the average -- 27.6% -- for all industries in this period.

Table II. NONAGRICULTURAL EMPLOYMENT IN OHIO BY INDUSTRY, 1950, 1960, AND 1970*

| INDUSTRY | NUMBER EMPLOYED (thousands) 1950 | 1960 | 1970 (projected) | CHANGE (percent) 1950 to 1960 | 1960 to 1970 |
|---|---|---|---|---|---|
| Mining | 29 | 20 | 16 | -31.0% | -20.0% |
| Contract Construction | 111 | 137 | 223 | 23.2 | 62.9 |
| Manufacturing | 1,162 | 1,289 | 1,629 | 10.9 | 26.3 |
| Transportation and Public Utilities | 219 | 211 | 239 | - 3.3 | 13.3 |
| Wholesale & Retail Trade | 496 | 620 | 802 | 25.1 | 29.4 |
| Finance, Insurance, & Real Estate | 80 | 119 | 170 | 48.5 | 43.2 |
| Service & Miscellaneous | 281 | 375 | 474 | 33.3 | 26.5 |
| Government: | 302 | 404 | 499 | 34.0 | 23.5 |
| Schools | 84 | 153 | 207 | 81.6 | 35.0 |
| Govt.,excl. schools | 217 | 251 | 292 | 15.5 | 16.3 |
| TOTAL | 2,680 | 3,175 | 4,052 | +18.5% | +27.6% |

Note: Individual items may not add to total due to rounding.
*Wage and salary employment.
SOURCE: Ohio Bureau of Unemployment Compensation, Division of Research, and Statistics, Manpower in Ohio, 1960 to 1970, Rev. Ed., March 1963, p. 32.

TII-1. Using the data in Table II, please check the correct answer.

A. Manufacturing employment in 1970 is projected to be twice as great as any other industrial group. True_____ False_____.

B. Employment in the Mining industry decreased between 1950 and 1960. True_____ False_____.

C. Employment in the Finance, Insurance, and Real Estate industries is expected to grow the fastest of any industrial group between 1960 and 1970. True_____ False_____.

D. The growth rates in employment for each industrial group will be about the same in 1960-1970 as the percentage growth for the particular group in the period 1950-1960. True_____ False_____.

TII-2. Which industrial groups are expected to have above-average increases in employment for the period 1960-1970?

* * *

Let's see if we can summarize what we have learned about employment trends in Ohio's manpower market. We have found that white-collar and service occupations are growing the fastest. Blue-collar occupations will actually grow faster during the period 1960-1970 than they did from 1950 to 1960. However, blue-collar occupations still show less growth than the average for all occupations. Farm jobs will decline in numbers during the 1960's, though not as much as they did in 1950-1960. Professional and technical workers are enjoying the greatest increase in employment. After farm workers, laborers have had the slowest growth in the employment rate. Operative workers have not been enjoying any great gains in employment. However, they will continue to be the largest occupational group.

Ohio is a state in which there are more workers employed in the service-producing industries than in the nonagricultural goods-producing industries. Employment in the service-producing industries on an average is growing faster than in the nonagriculture goods-producing industries. However, in the period 1960 to 1970 this rate of growth in employment is slowing down. Manufacturing industries (such as automobile assembly, rubber, steel, and soap) play an especially important part in the Ohio employment picture. More than twice as many people are employed in this industrial group as in any other one. However, growth in manufacturing employment in the 1950's was less than average. For the period 1960-1970, manufacturing employment will turn upward, almost reaching the average growth rate for all industries. Employment in mining has declined and is expected to continue downward. In the 1960's three industries are growing at above-average rates -- Contract construction; Wholesale and retail trade; and Finance, insurance, and real estate. Two industries in which employment expanded rapidly in the 1950's will grow at below-average rates in the 1960's -- Government (especially non-school employment) and Transportation and public utilities. The number of jobs in the Service and miscellaneous industrial group will increase almost at the average rate after rapid growth in the period 1950-1960.

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## Today's Lesson in Brief

The occupational and industrial composition of employment in Ohio will be different in the 1970's -- when you enter the work force -- than it was in the 1950's. You will want to consider the trends toward more job opportunities in the white-collar and service occupations and in the service-producing industries. However, in 1970, four out of every ten workers will still be employed in blue-collar occupations; and the manufacturing industries will still be the single most important industrial source of jobs in 1970. This case study of Ohio illustrates the types of changes that are taking place in manpower markets in many of our states.

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## Employment -- From the Roaring '20s to the Shifting '60s

The past 50 years have seen vast economic changes in our country, including changes in the number of Americans employed in various occupations and industries. In 1920 we were mainly a nation of blue-collar and farm workers. Today a majority of American workers are white-collar and service workers. These trends in employment reflect the growth, decline, and technological changes that have taken place in different industries in our economy. Whereas the goods-producing industries provided most of the jobs in the 1920's, we now find a majority of workers producing services. These trends in employment affect the opportunities you will have in our changing manpower market.

* * * * * * * * * *

Let's begin today's lesson by seeing what life was like for a typical young American worker in 1920: "The Case of Larry".

"Larry Stevenson was employed as a semi-skilled worker in an automobile plant, making Model-T Fords, in one of the fastest growing industries in the United States. Larry worked 50 hours a week and was paid $.70 an hour. He didn't belong to a labor union because employers generally were opposed to unions and often threatened to fire workers involved in union activities. Larry voted for James Cox (the Democratic Party's candidate) in the Presidential election that year because he thought thet Cox's support of the Treaty of Versailles was right, but the Republican candidate Warren Harding won and became the President of the United States. Silent movies (with Charlie Chaplin and Rudolph Valentino) were Larry's favorite leisure time activity, except for Sunday afternoons when he went out the ballpark to watch Ty Cobb play second base. Prohibition had just gone into affect, and he missed being able to drink beer with his friends. The current economic recession worried Larry because he might be laid off his job any day or find his wages cut."

* * *

That was 1920, nearly half a century ago. Times have changed -- the Model-T's, the Hardings, Valentinos, and Cobbs are all gone -- and sweeping changes have taken place in the way people live and work. For example, changes that have taken place in employment since 1920 can be seen in the data presented in two different tables. Table I (on the next page) shows the nonagricultural sources of employment by industry groups for selected years since 1920. It indicates, for example, that 1.2 million people were employed in mining in 1920, which was about 5% of all wage and salary workers employed that year. By 1965, there were only 600 thousand workers employed in mining -- less than 1% of the total number of wage and salary workers. Question: What else does the table show?

Table I. INDUSTRIAL DISTRIBUTION OF NONAGRICULTURAL EMPLOYMENT IN THE UNITED STATES IN 1920, 1940, 1965*

| Industrial Group | 1920 Millions | 1920 Percent** | 1940 Millions | 1940 Percent | 1965 Millions | 1965 Percent |
|---|---|---|---|---|---|---|
| Manufacturing | 10.7 | 39% | 11.0 | 34% | 18.0 | 30% |
| Mining | 1.2 | 5 | 0.9 | 3 | 0.6 | 1 |
| Contract Construction | 0.8 | 3 | 1.3 | 4 | 3.2 | 5 |
| Transportation and Public Utilities | 4.0 | 15 | 3.0 | 9 | 4.0 | 7 |
| Trade | 4.5 | 17 | 6.8 | 22 | 12.7 | 21 |
| Finance, Insurance, and Real Estate | 1.2 | 4 | 1.5 | 4 | 3.0 | 5 |
| Service and Miscellaneous | 2.4 | 8 | 3.7 | 11 | 9.1 | 15 |
| Government | 2.6 | 10 | 4.2 | 13 | 10.1 | 17 |
| TOTAL | 27.4 | 100% | 32.4 | 100% | 60.8 | 100% |

*Wage and salary workers.
**Percent figures rounded and may not add up to 100%.
SOURCE: U. S. Department of Labor, Bureau of Labor Statiwtics, Employment and Earning Statistics for the United States, 1909-66, October, 1966, p. xvi, U. S. President and U. S. Department of Labor, Manpower Report of the President, 1967, p. 274.

Questions: (Please check the correct answer for questions TI-1 through TI-3).

TI-1. About four out of every ten nonagricultural workers in 1920 were employed in the Manufacturing industry. True_____ False_____.

TI-2. In 1965, there were almost four times as many workers employed in the Service and Miscellaneous industries as there were in 1920. True_____ False_____.

TI-3. The total number of workers employed in the Finance, Insurance, and Real Estate Industries has increased almost four-fold since 1920. True_____ False_____.

TI-4. What three industrial groups have shown the greatest increase in employment from 1920 to 1965 as measured by their relative share of total employment?

TI-5. What trends do you see in the industrial sources of jobs since 1920?

Now let's look at the changes that have been taking place in the occupational composition of jobs in the United States since 1920. Table II shows what occupations workers were employed in during the period between 1920 and 1965. It shows, for example, that in 1920 there were 10.5 million workers employed in white-collar occupations, 25% of all workers in the economy. By 1965 there were 32.1 million workers employed in white-collar occupations -- a three-fold increase in number that brought the white-collar worker's share of total employment up to 45%.

Table II. EMPLOYMENT BY OCCUPATION IN THE UNITED STATES, SELECTED YEARS 1920-1965

| Occupational Group | 1920 Mil- lions | 1920 Per- cent* | 1940 Mil- lions | 1940 Per- cent | 1950 Mil- lions | 1950 Per- cent | 1965 Mil- lions | 1965 Per- cent |
|---|---|---|---|---|---|---|---|---|
| White-collar workers: | 10.5 | 25% | 16.1 | 31% | 21.6 | 37% | 32.1 | 45% |
| Professional and technical | 2.3 | 5 | 3.9 | 8 | 5.1 | 9 | 8.9 | 12 |
| Managers, officials and owners | 2.8 | 7 | 3.8 | 7 | 5.2 | 9 | 7.3 | 10 |
| Clerical | 3.4 | 8 | 5.0 | 10 | 7.2 | 12 | 11.2 | 16 |
| Sales | 2.1 | 5 | 3.5 | 7 | 4.1 | 7 | 4.7 | 7 |
| Blue-collar workers: | 17.0 | 40 | 20.6 | 40 | 24.3 | 41 | 26.5 | 37 |
| Craftsmen and foremen | 5.5 | 13 | 6.2 | 12 | 8.4 | 14 | 9.2 | 13 |
| Operatives | 6.6 | 16 | 9.5 | 18 | 12.0 | 20 | 13.4 | 19 |
| Laborers** | 4.9 | 12 | 4.9 | 9 | 3.9 | 7 | 3.9 | 5 |
| Service workers | 3.3 | 8 | 6.1 | 12 | 6.2 | 11 | 9.3 | 13 |
| Farm workers*** | 11.4 | 27 | 9.0 | 17 | 7.0 | 12 | 4.3 | 6 |
| TOTAL | 42.2 | 100% | 51.7 | 100% | 59.0 | 100% | 72.2 | 100% |

*Percent figures rounded and may not add up to totals.
**Excluding farm and mine.
***Farmers and farm managers, laborers, and foremen.
SOURCE: National Industrial Conference Board, The Economic Almanac 1964, pp. 44-45, U. S. President and U. S. Department of Labor, Manpower Report of the President 1967, p. 274.

Referring to the data in Table II, try to find the answer to the following questions: (please check the correct answers)

TII-1. The number of Laborers employed since 1920 has continuously been about 5 million. True____ False____.

TII-2. The number of Service workers employed has more than doubled in number between 1920 and 1960. True____ False____.

TII-3. In which one of the following four occupational groups of workers has employment grown fastest since 1920 as measured by its percentage of total employment? White-collar____ Blue-collar____ Service workers____ Farm workers____.

TII-4. What occupational trends have developed in employment since 1920?

* * *

Let's summarize what we have learned about employment trends in our economy during the last half century. Since 1920 more and more workers have been employed in the service-producing industries (by the 1950's we had become a nation predominately of service-producers). The trends toward service-producing in our economy has also been reflected in changes in the occupational structure of our economy. Since 1920 white-collar and service workers' occupations have been becoming increasingly more important (by the 1950's, for the first time in our history, white-collar workers outnumbered blue-collar workers).

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## Today's Lesson in Brief

The occupational and industrial basis of employment has changed in the last 50 years. Today we are predominately a nation of service-producers employed in white-collar and service_worker occupations.

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## Education's Payoff

"Let ignorance talk as it will, Learning has its value."

-- La Fontaine

Investments made in human resources result in benefits or "payoffs" that can be measured in dollar amounts. Education is one of the most important forms of investment in people. The cash value of a complete high school education is almost $1,000 a year greater than the value of a high school drop-out's education. A college education on the average pays off at the rate of $3,000 per year in extra earnings above what a high school graduate receives.

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In earlier lessons we saw how education (along with healthful food and housing, medical care, etc.) could be considered an "investment in human resources" -- the use of manpower, capital, and natural resources to help men and women improve their productive capacity. We also studied wages, earnings, and family incomes and found that workers having more education and training generally had more skills (Communications, Computational, Manual Dexterity, Group Relations) and were able to get and hold better-paying jobs. Today, we want to devote more attention to the cash value of education -- to learn more about the "payoff" that comes from investing in education and training.

* * *

In his excellent little book, RICH MAN POOR MAN (a Signet Paperback published in 1964), economist Herman P. Miller writes that: "Every study of the relationship between earnings and education shows that the more highly educated the man, the higher his earnings." Of course, there are many exceptions to this rule. We have all heard of the "self-made man" who dropped out of school at the age of 16 and then went on to become head of his own business firm, with a salary of $150,000 a year! On the average, however, there is no question that a person's chances of earning a higher income are much better if he has more education.

Is this because more schooling always makes people more productive? Not necessarily! The truth of the matter is that "educational attainment" is often used as a convenient method of "discriminating" in favor of certain people for jobs, training opportunities, promotions, etc. Employers give preference to high school graduates over dropouts in hiring. Labor unions sometimes require a high school diploma to qualify for apprentice training. So what does all this mean to you? To quote Mr. Miller again: "The fact remains that there are measurable financial returns associated with, though not necessarily the result of educational attainment." It means that your chances of having higher earnings (and a higher level of

living) can be improved by getting more education and training. Education <u>does</u> pay off.

Let's test this statement by looking at some facts concerning education and earnings. Table I shows the estimated lifetime earnings for men, according to the number of years of schooling they completed. Because these are <u>averages</u> and are <u>projections</u>, they will not, of course, be accurate for every worker. Moreover the figures will probably be revised (upward) as the years go by. (If this table looks familiar to you, it should! It is adapted from Table I in lesson #28.) Note that a worker with less than 8 years of schooling earns only 58% as much income as a high school graduate, while a college graduate will earn 56% <u>more</u> than a high school graduate.

Table I. <u>ESTIMATED LIFETIME EARNINGS, BY YEARS OF SCHOOL COMPLETED</u>*

| Year of School Completed | Lifetime Earnings* | Earnings as % of H. S. Graduates |
|---|---|---|
| Less than 8 years | $143,000 | 58% |
| 8 years | 184,000 | 75 |
| 1 to 3 years of high school | 212,000 | 86 |
| 4 years of high school | 247,000 | 100 |
| 1 to 3 years of college | 293,000 | 119 |
| 4 years of college | 385,000 | 156 |
| 5 or more years of college | 455,000 | 185 |

*Total earnings between age 18 and 64; data for males only. Estimates are based on actual earnings in 1959, with projections for the future, based on continuing growth of the economy.

SCURCE: Bureau of the Census, <u>Income Distribution in the United States</u>, by Herman P. Miller, Washington: U. S. Government Printing Office, 1966 (LC No. A66-7107) p. 270.

<u>Questions</u>: (Put a check-mark in the correct blank.)

I-1. A male worker with four years of college has lifetime earnings that are just about <u>double</u> the earnings of a high school graduate. True_____ False_____.

I-2. If you complete two years of college, you have an excellent chance of earning about twice as much in your lifetime as someone who drops out of high school in his third year. True_____ False_____.

I-3. In the introduction to today's lesson, it was <u>stated</u> that a high school diploma is worth nearly $1,000 a year in extra income compared with a dropout; and a college education is worth $3,000 a year in extra earnings. Check these figures against the data in Table I. (Hint: estimates of lifetime earnings were based on the assumption that a man's working life is 46 years.) Do you agree with the statements, or disagree? Agree_____ Diagree_____.

Now let's look at the lifetime earnings of workers in various occupations who have different amounts of schooling. Table II shows, for example, that a policeman who graduates from college could expect to earn about $286,000 in his lifetime -- about $7,000 a year, after graduation, based on projections of 1959 earnings. If his schooling ended with a high school diploma, his earnings would be $56,000 less.

Table II. LIFETIME EARNINGS BY OCCUPATION AND YEARS OF SCHOOLING

| Occupation | 1 to 3 years of high school | 4 years of high school | 1 to 3 yrs. of college | 4 yrs. of college |
|---|---|---|---|---|
| Accountants & Auditors | $272,000 | $286,000 | $292,000 | $361,000 |
| Carpenters | 193,000 | 209,000 | 207,000 | 229,000 |
| Clerical Workers | 203,000 | 218,000 | 225,000 | 258,000 |
| Electrical & Electronic Technicians | 263,000 | 270,000 | 263,000 | -- |
| Farm Labors & Foremen | 97,000 | 117,000 | 138,000 | 167,000 |
| Laborers (nonfarm) | 157,000 | 173,000 | 174,000 | 192,000 |
| Plumbers & Pipe Fitters | 242,000 | 252,000 | 258,000 | -- |
| Policemen & Detectives | 217,000 | 230,000 | 246,000 | 286,000 |
| Sales Workers | 232,000 | 276,000 | 306,000 | 287,000 |

Note: Estimates are for males only.
SOURCE: Bureau of the Census, Income Distribution in the United States, ibid., pp. 269-296.

Questions

II-1. Who has higher lifetime earnings, a Clerical Worker with two years of college, or an Electronic Technician with four years of high school? What kind of training did the Electronic Technician get to qualify for his job?

II-2. In general, do the facts support Miller's claim that "there are measurable financial returns associated with educational attainment"?

There are three things to keep in mind about these statistics on expected lifetime earnings:

1-- They do show that, in general, more education leads to higher earnings;
2-- They do not predict what any particular individual will earn in his lifetime (they only indicate what your chances are of earning a certain amount);
3-- The figures are subject to change as the economy grows and changes over time.

As an illustration of this third point, estimates of lifetime earnings by negro college graduates -- based on 1959 data -- probably will turn out to be incorrect in the long run. The Census Bureau reported that estimated lifetime earnings of negro college graduates amounted to $185,000, compared to $385,000 for white college graduates, and compared to $191,000 for white males who completed only eight years of schooling. However, earnings and family income of negroes have been going up relative to whites recently. In 1966, median family income of negroes was 58% of the median family income of whites. Annual earnings by negro men in 1966 ranged from two-thirds to four-fifths as much as whites having comparable education.

* * *

Question: How would you explain the fact that the average Negro college graduate could expect to earn less than the average White worker who stopped his education after the 8th grade?

* * *

Much of the data we have presented on lifetime earnings is concerned with high school and college education. There is no information about women's earnings, or about the type and quality of schooling. Why? The answer in part is that economists have only begun to study the payoff from education; much research remains to be done. Only a few findings have so far been published, for example, on the cash value of technical training. One study showed that a year after completion of a post-high school technical course in North Carolina, graduates were earning $553 a year more than their high school classmates; and at the end of the four years, the training-related earnings advantage had increased to $1,036.

* * *

Education provides many benefits to individuals and to the whole society. It helps to free man from ignorance; it strengthens democracy; it helps make the economy more productive. Education also provides a cash payoff to the individual worker who invests in his own "human capital" by getting more schooling and training. This is an important lesson for young people to learn, especially boys and girls growing up in low-income homes. Education can increase your chances of getting a better job as well as a better-paying job and offers a possible escape from poverty and dependency.

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## Today's Lesson in Brief

Education is an investment in human resources that yields a cash payoff. Studies show that the more highly educated a person is, the higher his earnings. Education provides many benefits to the individual and to society as a whole. It offers a possible way out of poverty, deprivation, and dependency for children growing up in low-income families.

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## Education: Engine of Our Nation's Economic Growth

Economic growth -- a steady increase in Gross National Product per person -- is one of the most important goals of the American people. Growth is caused by increases in the quantity of productive resources available for use, improvements in the quality of resources, technological progress, and greater efficiency in production. Recent research shows that EDUCATION stands out as one of the most important sources of American economic growth.

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Early in the course, we listed seven major economic goals of the American people:

1-- Full Production (full and efficient employment of all available resources)

2-- Stable Growth (steady increases in Gross National Product per person, each year)

3-- Freedom of Choice (for workers, consumers, and business enterprise)

4-- Equality of Opportunity (for all men and women to participate fully in our economic life)

5-- Economic Security (to assure freedom from want for every American)

6-- Economic Justice (a fair and honest division of income among workers, property owners, and families)

7-- International Balance (to maintain harmonious economic relationships with other nations of the world)

* * *

The first two goals concern the OVERALL LEVEL of our nation's output and income. We want to produce as much as we can in any particular year (Full Production), and we also want to increase our ability to produce even more goods and services year after year (Economic Growth, as indicated by a higher Gross National Product each year). How well has the U. S. economy been performing?

In the first half of 1967, our economy was operating close to Full Production; and Gross National Product was increasing at a rate about $40 billion higher than the year before. Between 1956 and 1966, the annual rate of real GNP (after all adjustments for inflation of prices)

increased more than $200 billion, an increase of 47%! Real GNP per person (after adjusting for the increase in population) rose from $2,640 in 1956 to $3,300 in 1966 -- an increase of about 24% in 10 years. Between 1909 and 1957, total GNP quadrupled and real GNP per person doubled. This meant twice the quantity of goods and services available for every man, woman, and child in America.

Questions

1. Does it seem to you that the American economy grew very much between 1909 and 1957? Between 1956 and 1966? Explain your answer.

2. Explain the meaning of each of the following:
   a) "total GNP in current prices"
   b) "real GNP"
   c) "real GNP per person"

* * *

We know the meaning of Economic Growth, and we checked some facts on recent growth of GNP in the American economy. Now let's ask a question of economic theory: What causes economic growth? What are the sources of economic growth?

To answer this question, we shall introduce a simple analytical framework that permits us to list all the possible causes of economic growth:

1) Increases in the quantity of productive resources (manpower, capital, natural resources);

2) Improvements in the quality of resources (such as new and better machinery, and human resources that have had more education and training);

3) Advances in technology (including automation and cybernation);

4) Greater efficiency (better management, economies of large-scale production and marketing).

Within this framework, we can fit each and every economic change that increases our ability to produce more goods and services. For example, if we add a million and a half workers to our civilian labor force (as we did in 1966) we enlarge our total productive capability. When business firms invest $60 billion in new plant and equipment (as they did in 1966), the productive capacity of the American economy goes up. In similar fashion, our economy also grows when the quality of our resources improves, when we make progress in technology, or when business management finds more efficient methods of production.

Economists have estimated that our ability to produce goods and services in the American economy is increasing at an annual rate of about 4% each year -- because of all the additions and improvements we make in our resources and methods of production. So long as we provide jobs for our manpower, and productive uses for our capital goods and natural resources, our actual growth in GNP can keep up with the growth of our potential GNP. In 1966 and 1967, this is what actually happened in the U. S. economy.

Question: Assume that our nation's GNP was $700 billion last year. If our economy grows at its full potential of 4% this year, what will be our new GNP (in constant, non-inflated prices)?

* * *

And now comes the big question: What specific factors have actually caused the growth of the U. S. economy? What are the "engines" of economic growth that provide the thrust and the drive for our ever-increasing GNP?

Before the 1960's, as we explained in an earlier lesson, economists used to assume that most of our growth was caused by investment in capital goods, along with certain improvements in production methods. Now, however, we are finding that growth depends to a very great extent on manpower -- on the quantity and quality of our human resources.

A famous research report published in 1962, for example, indicated that increases in the number of workers employed (between 1929 and 1957) accounted for about 30% of total growth, and improvements in the quality of the labor force -- because workers had more education -- contributed 23% of the increase in national production.

Another major source of growth was the increase in knowledge, which contributed 20% of the increased output. Investment in nonhuman capital goods contributed 15% of our growth. Other factors, such as economies of large-scale production and marketing, accounted for the remaining 12% of growth.

Note that education made a direct contribution of 23% of our nation's economic growth, and also made indirect contributions to growth by advancing knowledge and miscellaneous improvements in the organization and methods of production. Other studies have all reached similar conclusions:

-- that education has directly contributed approximately one-fourth of the growth that our American economy has made in recent years;

-- education contributes indirectly to our economic growth by increasing knowledge which can be applied to production;

-- the returns from educational expenditures (investments in human resources) are equal to or greater than returns from other investments in the American economy.

* * *

Questions

1. Research studies show that education is an important "engine of our nation's economic growth". What is the "fuel" that makes this engine run? What actions might the American people take in view of these findings concerning the role of human resources in our economy?

2. List some important noneconomic benefits of education, and be prepared to discuss them in class.

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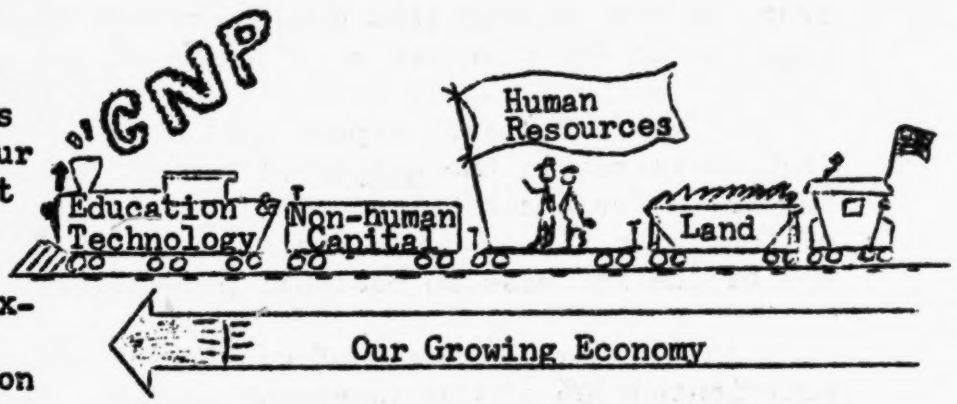
Today's Lesson in Brief




Because education helps to improve the quality of our nation's human resources, it is an important source of economic growth. Research studies indicate that approximately one-fourth of the growth in national production is the direct result of improved education of the work force. Education also contributes indirectly to economic growth by helping expand knowledge which can be used in production. Finally, increased education provides certain noneconomic benefits, such as better-informed citizens.

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## Will There Be Enough Jobs for Everyone?

When workers are employed, they help produce goods and services, they earn income, and they are busy doing something that has a purpose. In contrast, jobless workers are a waste of manpower, their earnings stop, and they suffer the indignity of being judged "worthless" (at least temporarily) by the manpower market. What forces determine the total number of jobs available in our economy at any given time? In a job-oriented, market economy like ours, the question posed by today's lesson is of great importance to all potential workers and members of their families.

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In mid-1967, the American economy was close to "full employment". More than 77 million men and women were employed in civilian jobs (plus 3½ million in the armed forces), and only 3 million workers -- 3.9% of the labor force -- were jobless. Because we were so close to full employment, the economy was said to be operating virtually at Full Production.

By contrast, in the recession year of 1958, there were 5 million unemployed workers in the U. S. economy, and the unemployment rate was above 7%. Newspapers and magazines were filled with pictures and stories describing problems of the unemployed. The situation reminded older workers of the Great Depression of the 1930's, when 13 million workers were jobless -- 25% of the labor force!

* * *

We studied some of the problems of unemployment in previous lessons and noted the economic waste caused by idle manpower. We saw how families were deprived of food, clothing, and other necessities because the breadwinner had lost his job and earnings. We know also that a worker has a feeling of personal frustration, humiliation, and failure when he wants work, is willing and able to work, but can't find a job.

In today's lesson let's find out what economic theory has to say about the very important question: Will there be enough jobs for everybody? We can begin by reviewing the Circular Flow of Economic Activity, as it appears in modified form in Chart I on the next page.

Chart I. TOTAL SPENDING AND TOTAL EMPLOYMENT IN OUR MARKET ECONOMY

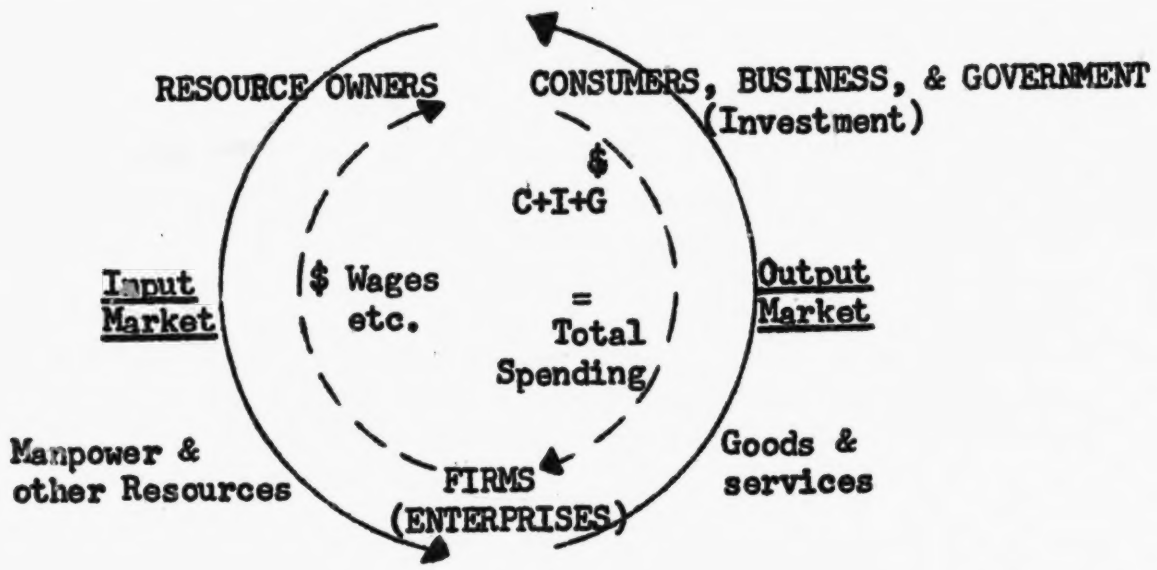



Chart I shows that goods and services are produced for sale to Consumers (and also to Business Firms and Government). When Total Spending (effective demand in the market) goes up, Firms are able to sell more goods and services. But they can't sell more unless they produce more. Since there's no such thing as a free lunch -- it takes inputs to get more output -- Firms must employ more manpower, capital, and natural resources. Thus, increased spending in the output market leads to increased employment in the input market (and increased production). Note, however, that there is a limit to this power of spending to create jobs and output. When all, or nearly all of our manpower and other resources are employed, additional spending can't create additional jobs and output. The upper limit to our Gross National Product is reached in the short run when we have achieved "full employment" of available resources -- generally indicated by an unemployment rate of around 3% of the labor force.

There is a very simple way to summarize this theory of total employment:

$$E=f(C+I+G),$$

which means that Employment (total number of jobs in the economy) is a function of (depends on) Total Spending (effective market demand) for Consumption plus Investment plus Government's purchases of goods and services. You will recognize that "Total Spending" is the same thing as GNP: the sum of Consumption, Investment, and Government purchases (plus Net Exports, which we shall ignore here). Therefore, what this means is that total employment is determined by the level of GNP spending! The more total spending by Consumers, business Investment, and Government -- within the limit set by the available manpower and other resources -- the more job opportunities there will be in the economy.

Recalling the question that was posed in the title of today's lesson, we can conclude that (except for frictional and structural unemployment):

-- there <u>will</u> be enough jobs for everyone <u>if</u> total spending is high enough to justify using all the available resources in production.

-- there will <u>not</u> be enough jobs for everyone if total spending in the market is too <u>low</u>.

-- if total spending is <u>too</u> high, there will be serious disruptions in the manpower market and the entire economy because of inflation.

* * *

<u>Questions</u>

1. What can be done when the level of Total Spending in the economy is so low that millions of workers are unemployed, as in the 1930's and to a lesser extent in 1958? (Hint: You may want to review lesson #59.)

2. How can Total Spending be increased or decreased to provide full employment without inflation?

3. In general, if Total Spending is too low, is it better for Consumption spending, or Investment, or Government spending to be increased? Why?

4. Would it be possible to reduce unemployment to zero by increasing the level of Total Spending? Why not? What would happen if we tried?

* * *

The subject of employment is a very broad one indeed. Many books have been written to try to explain the causes of employment and unemployment. There are college courses devoted entirely to the theory, history, and statistics of employment and unemployment. We can't expect to study all of the important ideas about employment in this course. However, there is one additional matter to consider: the prediction of <u>mass unemployment</u> caused by automation and <u>cybernation</u>.

Will machines gobble up all the jobs, and force tens of millions of workers into the ranks of the unemployed? If so, when?

In 1964, a small group of Americans formed a committee and wrote a memorandum to the President of the United States. It was called the "Memorandum on the Triple Revolution", and it called attention to the fact that important changes were taking place in the fields of <u>Weaponry</u> (atomic and nuclear weapons), <u>Human Rights</u> (the civil rights movement by Negroes), and <u>Cybernation</u> (technology and economic life).

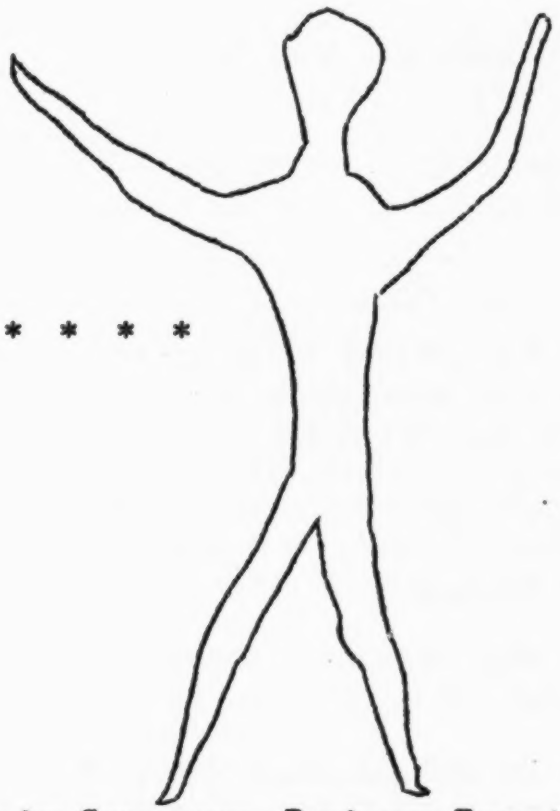
Writers of the memorandum claim that we are entering a new period of economic life in which machines will do most of the work and tens of millions of men and women will be unable to find jobs -- perhaps as early as the 1970's! They urged the American people to plan ahead for these revolutionary changes brought on by cybernation, so that we could learn to accept a world where most people do not have jobs. Among other things, we would have to figure out a new way to share the nation's abundance of goods and services -- without relying on employment and earnings to determine how much income each person and family would receive.

The public reaction to this memorandum on The Triple Revolution has been varied. Many people agree with the writers that machines are causing revolutionary changes in our economic life and automation is destroying millions of jobs. Other people say that this might happen a hundred years or so in the future but isn't happening now. They point out the fact that total civilian employment in the U. S. is at an all-time high. Unemployment rates are at the lowest level in 13 years, right at the time when cybernation supposedly is destroying so many millions of jobs. Many new employment opportunities are being created in the service fields, such as teaching, medical care, and recreation, where manpower shortages exist.

Still ..... it is hard to predict what the future will bring. It is a wise man who wrote: "The future belongs to those who prepare for it."

Question:

How can you prepare now for life in the 21st century?



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## Today's Lesson in Brief

Employed workers are able to contribute to production, earn an income, and participate in useful activity. But jobs are not always available for everyone able and willing to work. In general, the total number of job opportunities that exist in the economy will depend on the total level of spending by Consumers, Business Investment, and Government. If Total Spending is too low, there will not be enough jobs for everybody able and willing to work. If Total Spending is too high, the manpower market and the entire eccnomy will be disrupted by inflation. If Total Spending is "just right" the economy can have full employment and full production, without inflation.

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## What Do Employers Expect From Their Workers?

To get and hold a job, a worker has to meet certain requirements set by his employer. These include not only particular skills, but also personal qualities that the employer believes the worker must have to be successful on the job. A worker who knows what employers expect and require can develop skills and attitudes that will help him obtain employment by being prepared for the all-important job interview.

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There are several different ways of finding out what employers expect from their workers. One approach is to look at the method employers use for hiring new employees. Usually a prospective worker is first asked to fill out a job application form. This form asks for some personal information about the worker which the employer thinks will be helpful in deciding whether or not to hire him. The employer learns several valuable things about the worker from the information that is put on the application form. For example, he learns something about the communication skills of the potential employee -- can he read and follow directions, and does he write or type neatly? -- and whether he can complete a simple task. Information on the worker's education, training, and prior work experience is also obtained.

If the worker's completed application suggests that he is qualified for the job, he may then be given a personal interview. This interview will involve the prospective employee and at least the employer or one of his representatives (e.g., job interviewer or personnel manager). The interview may also include a supervisor that the employee would work with if he is hired. The employer or his representative will usually begin the interview by asking some questions about the information given on the job application form which he finds interesting or on which he may want more details. The interviewer will listen very closely to the answers that are given, paying attention not only to what he said, but how he says it. The prospective employee, in turn, is given an opportunity to ask questions about the work he is expected to do if he is hired. For some kinds of jobs, the interviewer will evaluate the prospective employee on the basis of what type of question he asks. Is the worker interested primarily in opportunities? promotions? pay? fringe benefits? hours? or working conditions?

What have we learned so far about the question posed in the title of today's lesson? The use of job application forms as one of the means of screening workers suggests that employers expect their employees to be able to follow directions and fill out simple forms neatly, clearly, and thoroughly. These application forms almost always ask about education, training, and work experience; therefore we know that employers are interested in the type and amount of skills a worker has. The fact that employers sometimes insist on an interview with the prospective employee points out the importance of communication and human relations skills. Employees are expected not only to be able to express themselves, but also to have skill in listening to others and following instructions.

Discussion Questions: How can you learn how to fill out a job application form and participate in a job interview? What mistakes do you think workers might make in their job interviews?

* * *

Another way of finding out what employers expect from their workers is to examine the type of questions they ask prospective employees when they actually interview them. The purpose of the interview is primarily to get information from the worker which will help the employer decide whether or not to hire him. (A secondary purpose is to gain information about the potential employee's attitudes and values.) What are the concerns of employers as reflected in the questions they ask during the interview? Here are some. (Please add some additional questions that you think employers might ask.)

-- What are your future vocational plans?

-- What qualifications do you have that will make you successful in this job?

-- Can you follow instructions without feeling upset?

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* * *

Although workers must have specialized knowledge, particular skills, and work experience to qualify for some jobs, many employers place 75% to 85% of the emphasis in their hiring practices on personality and character qualifications. This attention to personal attitudes and characteristics is especially prevalent when hiring young workers.

Reports published by business firms and by the U. S. Employment Service indicate that employers want their workers to be dependable, cooperative, industrious, loyal to the enterprise. Can you list some additional personal characteristics and attitudes that you think employers would want their employees to have?

-- Initiative --

-- Cheerfulness --

-- Pride in their work --

-- --

* * *

Industrial sociologists point out that the expectations of workers and employers differ as to what will take place in the work place and on the job. How are differences explained? First, because of differences in attitudes and values among people; and second, people have different ways of defining and expressing the same attitude and values. (The subject of "value conflicts" will be discussed in later lessons.)

This difference in expectations gives rise to job-adjustment problems. The nature of these problems gives us another insight into what employers expect from their workers. A study made a few years ago found that the following were the most frequently mentioned job-adjustment problems of young white-collar workers:

-- Willingness to start at the bottom, regardless of education; realization that personal advancement requires hard work, often on routine and seemingly unimportant tasks.

-- Learning to get along well with supervisors and fellow workers; adjusting to the personalities of others; working cooperatively with men who have less schooling and more experience.

-- Learning to live on a lower salary than was expected, and accepting the fact that advancement may be slow.

-- Developing efficient work habits: ability to work independently, not trying to do everything at once, careful planning of time.

Question: Why do you suppose that employers and employees expect somewhat different things in the work place and on the job?

* * *

Another insight into what employers expect from their employees can be obtained from the research that has been done on the reasons why workers are fired. One finding that all these studies agree on is that in most cases (60% to 90%) the chief reason for dismisal is a shortcoming in personal traits, not technical skills. (Emotional and social weaknesses rather than technical incompetence is the reason why most workers are fired.) Industrial relations studies reveal that the following attitudes and values are among those that get workers fired:

| | |
|---|---|
| -- Inability or refusal to follow instructions | LIST SOME OTHERS: |
| -- Laziness | -- |
| -- Unexplained or frequent absences or tardiness | -- |
| -- Carelessness | -- |

* * *

Let's summarize what we have learned about the expectations employers have about their employees. Employers want workers who have the training, experience, and technical skills needed to do the job. In addition, employees are also required to have certain personal traits needed to perform their work. Attitudes and values that employers expect from their employees include: cooperation, dependability, efficiency, loyalty, initiative, and cheerfulness.

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## Today's Lesson in Brief

Employers expect their workers to have both the skills and the personal characteristics needed to perform their jobs in an efficient manner. A knowledge of what employers expect from their employees will be useful to you in getting a job and being successful in your work.

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## Is There Reason and Justice in the Work Place?

Unfortunately, reason and justice and fair treatment do not always rule in the work place. Workers, supervisors, employers -- like men and women everywhere -- sometimes behave in an "unreasonable" and even "inexcusable" manner. We as workers, do not always think, feel, or behave "rationally" toward our jobs, fellow workers, or employers. On the other hand, our fellow workers and employers are not always rational and fair in the way they treat us on the job. Knowledge that irrationality and injustice do exist in the work place will help prepare you for situations that you sometimes will be facing on the job. Knowing what to expect can improve your ability to deal with the work situation.

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Do reason, justice, and virtue always triumph in the work place? Do the "good guys" win over the "bad guys"? Do the most deserving workers always get the highest pay and the quickest promotions? Unfortunately, the answer is no, not by a long shot. Often the decisions and behavior of fellow workers, supervisors, and employers reflect such emotions as anger, group morale, envy, favoritism, prejudice, and even hatred.

The following cases illustrate different kinds of irrationality and injustice in the work place.

CASE #1 "The Glee Club"

"In an automobile plant there was a group of men who sang while they worked on the assembly line. They were led by a big, middle-aged fellow with a booming bass voice. The men would work in silence for awhile, then their leader would sound the first note and they would all sing in rhythm to the repetitive motions of the line.

"When a new plant manager was appointed, the outgoing manager oriented his successor in the usual manner. He explained the organization chart, the policies, and the procedures. He made no mention of the singing -- it had no place in management's official procedures or policies.

"The new manager had hardly settled behind his desk when the singing started. He called in his assistant and demanded an explanation. The assistant said, 'Well, sir, the men just like to sing while they work.'

The manager replied, 'We're running a factory, not a glee club! The men are here to work! Stop the singing at once!' The order was sent out to the assembly line and the singing stopped.

"(This is the end of the story -- except to record that for months and years afterward the assembly line never attained the level of production it had made in the 'glee club' period. Somehow, not as much work got done, even though the men were doing nothing but work.)"

* * *

CASE #2 "Who Cares About Test Scores?"

"A young personnel assistant carefully administered tests to several applicants for an important secretarial position in the office. He also gathered data about the prospective employees' educational background, training, work experience, and references. Combining the test scores with the background information, he narrowed the prospects down to two girls.

"The serious-minded personnel assistant then assembled all of the test scores, applications, and letters of reference -- and brought them to the Director's desk. 'Two of the girls seem equally qualified for this position, sir; and I would like to have your evaluation of the applications.' To which the Director replied: 'Who cares about test scores and application forms. Hire the girl with the prettiest face!'"

Questions: Is there anything irrational or unjust in these two cases? What are some specific things a supervisor can do to assure rational treatment and justice for his workers?

* * *

Do you think it is easy to decide what is fair and reasonable in the work place? Consider the whole range of feelings, ideas, and behavior that people have on the job. Look at the following situations -- each of which involves differences in opinions about what is reasonable and just-- and be prepared to tell the class what you think would be a reasonable and just decision in each case.

CASE #3 "Politics on the Job"

"Jones was a maintenance man with an exceptionally good work record. One day, a witness before a Congressional committee charged that Jones had once been an active member of the Communist Party. When Jones pleaded the Fifth Amendment before the committee, he was fired by the company on grounds that his presence on the job caused friction among employees, many of whom absolutely refused to work with him.

"Jones filed a grievance protesting his firing. 'My refusal to testify before a Congressional committee is none of the company's business. I have a good work record, and I have done nothing on the job to warrant being fired. Employee resentment against me is not my doing. I have a right to plead the Fifth Amendment under the Constitution of the United States; and even if that makes me unpopular, it is not a sufficient reason to get rid of me. Management should judge me on my work ability and not my political views.'"

Question: Should an employee be fired because publicity about his political activities and ideas are creating production problems for the employer? Explain your answer.

* * *

CASE #4 "The Rights of Seniority"

"Being shorthanded one day, the foreman asked Lee Small to take on some extra duties -- rubber-stamping and marking some boxes. The assignment was outside Small's regular and usual duties, but would take only about an hour and a half.

"Small refused to do the extra work. He claimed that it was a company practice to give such 'low work' to junior employees and he had a lot of seniority. The company had received similar refusals from other workers and this time decided to make an issue out of Small's refusal (the question of management's right to assign work). In arbitration proceedings that followed, the company argued that there were no job descriptions in the plant. Therefore, Small couldn't claim any violation of company policy when he was assigned any kind of work. The company pointed out that its plant-wide seniority applied only to layoffs and recalls. The company admitted it usually assigned junior employees to do the type of job that Small refused to do, but this practice was not a rigid policy. The company argued that management needed flexibility in assigning jobs in order to keep the men working efficiently.

"Small claimed that other workers had refused such 'lowly' assignments before; so he had a right to do the same. He also emphasized his seniority and argued that the foreman should assign junior workers to do those chores."

Question: Should an employee be allowed to refuse "lowly" work assignments on grounds of his seniority? Why, or why not?

* * *

CASE #5 "The Best Man for the Job"

"Last month, Charley Brown completed his 10th year of loyal service to the Best Products Manufacturing Company. He has been a hard worker, never missed a day from the job, helps new employees get settled in their

work. Rather on the quiet side, Charley is known and respected by everyone as a 'good, steady man'. Pete Whitney just came to work for the company eight months ago and was assigned to Charley's department. Pete is likeable, a good bowler on the department's team, but something of a 'goof-off'. He can be counted on for an amusing explanation of why he missed another day's work. He lets Charley help the new men learn the job while he entertains them with his endless supply of jokes. Everybody likes Pete, including the boss (who, incidentally, is also a member of the department bowling team).

"An opportunity opens up for a new supervisor's job, and the boss has to pick 'the best-qualified man' for the job. Question: Who gets picked -- Charley or Pete?" (Which one would you pick if you were the boss, and why?)

* * *

CASE #6 "What Is Women's Work?"

"The company had a policy of promoting workers on the basis of seniority, willingness, and ability. When a couple of machine-assembly jobs opened up, two women applied. They had the seniority and the willingness. The company turned down their 'bids', claiming that they did not have the ability because they were women. The women let out a yell when they heard this, arguing that only two years ago many women were working at these jobs and did them as well as any man. The women said, 'Give us a try for 30 days and we'll show you who's the weaker sex!'

"The company refused the women's request, based on the following reasons: The work area was too far from the women's rest rooms. The work facilities in the department would require costly rearrangements to make them suitable for female workers. Management had the company doctor look over the jobs, and he decided that they were strictly 'male' jobs. 'These jobs would be bad for the health of women who are not used to such heavy work.'"

Question: Should an employer refuse to assign women to a certain job because he feels it isn't women's work? Explain your answer.

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Today's Lesson in Brief

Irrationality and injustice do exist in the work place. The ideas, attitudes, values, and behavior of workers and employers reflect irrational responses to the work place and the job. It is not always easy to know just what is rational and fair in each situation. Workers who come to their jobs knowing they will find some irrationality and injustice will be better able to deal with the situation.

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## Man Is More Than A Means of Production

"Man is not only the end, but also the means of production. Out of his dual capacity arises a conflict between his activities as a producer and his interests as a man -- a clash between life and work."

-- Sumner Slichter

Man is constantly making "value judgments" about what is good and what is bad -- in the work place and in the larger society. Conflicts of values arise within ourselves, with other individuals, with groups of people, and with institutions. These conflicts exist because we all have our own values, which differ somewhat from those of other people and the institutions of our society. As a young worker you will be faced with value conflicts. Only you can decide which values you will hold and how you will rank them. The satisfactions which you receive from work will be closely tied to your ability to resolve value conflicts that arise in the work place.

* * * * * * * * * *

What are the causes of the value conflicts that exist in the work place and society? In previous lessons we discussed the basic needs of man and difference in needs among individuals. For example, we learned that all men need nearly equal amounts of food and water, but the amount of "creative expression" that each person needs varies. This difference in needs among men may create value conflicts. We also have found that people can fulfill their needs in different ways. Because the different needs of man can be fulfilled in different ways (even the same need can be fulfilled in various ways) conflicts in values arise.

Question: Give some examples of conflicts in values which might exist because of the different needs of man.
‡Here's an example involving the need for security and the need for personal integrity: In order to achieve my need for economic security, I may adopt the practice of "playing it safe" -- not getting involved in anything controversial. "Playing it safe" (to achieve security) may clash with my value of standing-up for what I believe (personal integrity).

Conflicts in values also arise because we perform many different roles (often at the same time) during our lives. Men and women are many different things to many different people. Some of these roles are economic in nature -- as worker-producer, consumer, citizen. Other roles are social -- as husband, father, son, student, or wife, mother, sister, community volunteer worker, and housekeeper.

Questions: What are some of the other roles that men and women play? How do these roles lead to value conflicts? Give two specific examples illustrating value conflicts arising out of the roles we play.

* * *

Traditionally, our society has emphasized that the worker is important because he is a valuable "input" that produces goods and services. But can a worker fulfill his own needs as a man (or woman) if he is viewed by others as a physical means of production? A society which views work primarily in terms of output -- how much is produced -- is likely to create value conflicts because the worker is primarily concerned with work from the standpoint of "what's in it for him". He wants a pleasant and satisfying life doing interesting and rewarding things. He wants more than high wages. But what happens to the worker's non-monetary needs if work is designed to maximize output rather than satisfy the needs of the worker? Conflicts of values occur!

* * *

Let's see what kinds of value conflicts a worker may face. Here are some examples:

-- Conflicts arising among individual workers in their interpersonal relations. Differences in attitudes about smoking cigars on the job may lead to conflict. (Phill refuses to stop smoking cigars in the office even though it makes Bob and the other office staff ill.)

-- Conflicts arise within the individual. What I have to do to be "successful" on the job may conflict with my other values. To get up the ladder of success, I may feel that I have to take advantage of my fellow workers while at the same time I am trying to be a practicing Christian. What I value as a husband and father, may clash with what I value as a worker. If I want to "get ahead" on my job, I may have to work long hours, leaving very little time to spend with my family. A wife and mother who accepts employment may be torn between whether she should work (perhaps to satisfy her desire for expression and professional activity) or whether she should stay home and take care of her children. Are the children getting adequate care while she is gone? Does the income she earns contribute more to her family's well-being than would being a full-time mother and housewife?

-- Conflicts may appear between the individual and the work group (people you work with) as a unit. Perhaps your co-workers believe in doing as little as they can get by with, but you may be a "go-getter". In this situation, what do you do? Please the "easy-going" group or please yourself? Have you ever heard of a person getting fired for being too efficient? Is this Impossible? Ridiculous? Read the true case of "Harry, the Go-Getter":

"Harry went to work as an auto mechanic in a downtown garage. After a few days, the boss told him that he liked his work and hoped that he would be working there a long time. However, when he went to get his first pay check, he was told that he was <u>fired</u>! Why? His boss said that he was so energetic and ambitious that the old-timers around the garage looked awfully slow in comparison. Harry's energetic work routine made the other workers so nervous they complained to the boss. The boss told Harry that obviously he could not fire all the old timers -- so he had to fire Harry!"

--Conflicts may also arise when the values of the individual worker are different from the values of the <u>organization</u> he works for. You may believe that "honesty is the best policy" and never consider cheating or being dishonest. The organization's values may be somewhat different from yours. Your employer directs you to falsify some office records in order to reduce the amount of tax that would be paid. Whose values will you follow -- yours, or the organization's?

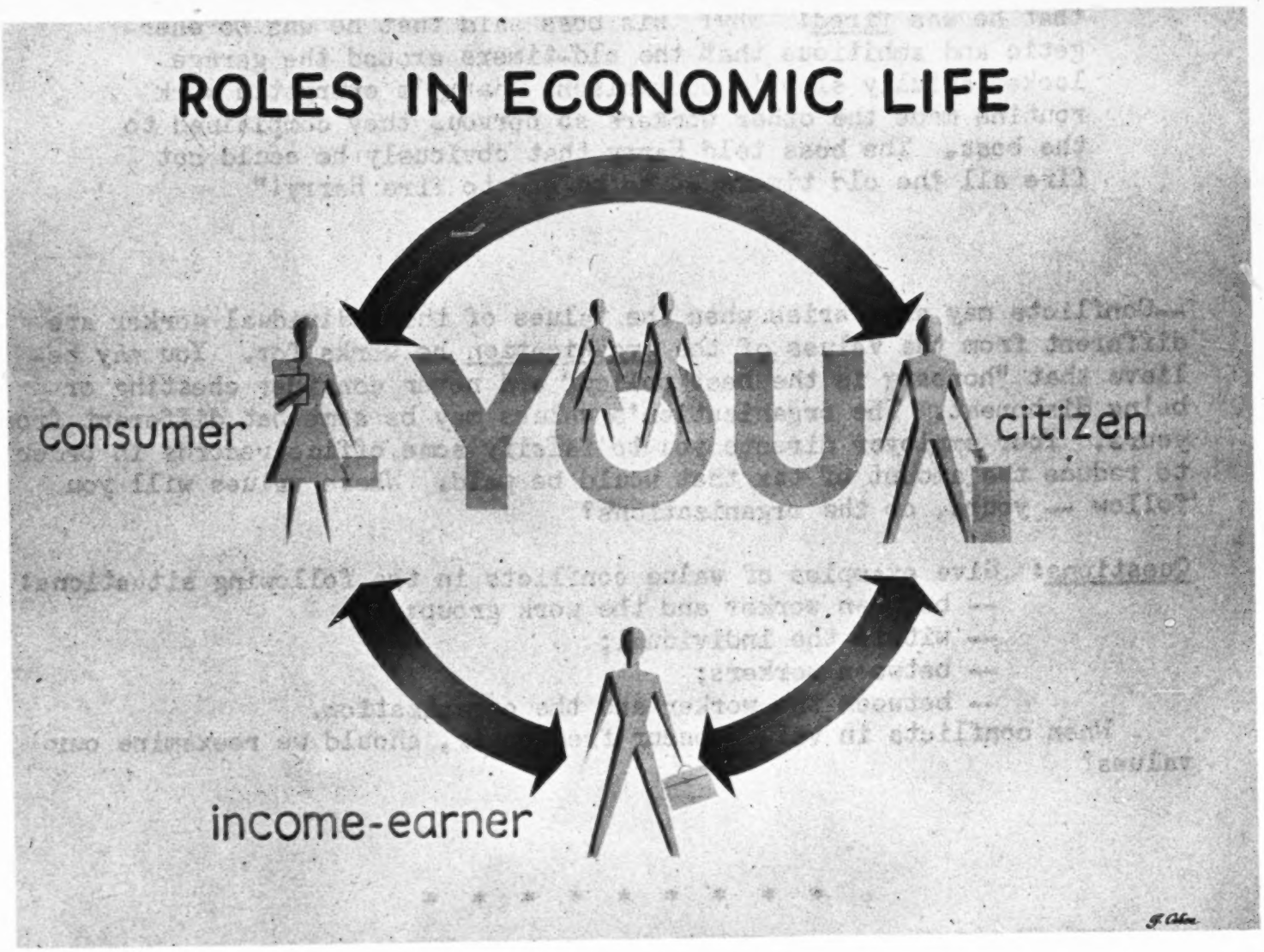
<u>Questions</u>: Give examples of value conflicts in the following situations:
-- between worker and the work group;
-- within the individual;
-- between workers;
-- between the worker and the organization.

When conflicts in values occur frequently, should we reexamine our values?

* * * * * * * * * *

## <u>Today's Lesson in Brief</u>

Values are ideas about what is good and bad, right and wrong. Value conflicts arise in the work place. These conflicts appear because individuals have different needs and different ways of fulfilling needs, and also because they have many roles to perform in their lives. Value conflicts can arise within ourselves, between and among individual workers, between the work group and the individual, and between the worker and the organization. Each worker must decide for himself what values he wishes to hold and what costs he is willing to bear for choosing certain values. In the world of values, as in the world of economics, "there is no such thing as a free lunch".




Conflicts of values may arise as we perform our three different economic roles. For example, we may want more income to spend for consumer goods but prefer to work fewer hours, which would mean less earnings. Value conflicts also occur between our economic and our noneconomic roles. The job that would bring us the highest income may not give us the social status we desire.

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## What Price Success?

"If a man does not keep pace with his companions,
perhaps it is because he hears a different drum."

-- Henry Thoreau

Most Americans seem to believe that Success is a very important goal that's well worth striving for. In this lesson we'll examine "success" by asking a number of questions about it: What is success? (-- money? power? social status? something entirely different?) How is it achieved? What is the price that some people pay to achieve success? The answers you give to these questions may help you establish your own goals and values in life and also aid you in understanding the behavior of other people.

* * * * * * * * * *

Success is a goal that is sought by almost all Americans. It has been called "the Great American Dream". But what is success? Here are some comments that people have made about success:

"The ambition to succeed is the ambition of every parent for his child. It is strictly an American ambition; at once the national vice and the national virtue. It is the mainspring of activity, the driving wheel of industry; the spur to intellectual and moral progress. It gives the individual energy; the nation push. It makes us at once active and restless; industrious and overworked; generous and greedy. When it is great, it is a virtue; when it is petty, it is a vice."

"Politicians equate success with power, public relations men with fame. Teachers and moralists rate themselves successful when they have influenced the minds and characters of others. Men of creative instinct strive for self-realization. Humanitarians identify success with service, reformers with bringing about changes in society. To the religious, success is salvation, and to thousands of ordinary people, it is nothing more than contentment and a sense of happiness. Each of these definitions shows worthy ideals, but no one of these concepts enjoys such universal favor in America as that which equates success with making money."

"Success in life means to a person that he has found his own significance in life -- found what is important to him."

* * *

Question: How would you define success? What values and specific goals are implied by your definition? (Hint: See examples underlined in the paragraph above.)

* * *

Now let's consider how money and success are linked together in the minds of Americans. The traditional heroes of America -- such as Thomas Edison, Andrew Carnegie, Henry Ford, David Sarnoff -- are successful self-made men. America's heroes have been active in every field from politics to the arts, but nowhere have they achieved more rewards and fame than in business. To many Americans, their hero is the office boy who has become the head of a great business firm, making millions of dollars in the process. He represents a very popular idea of success -- the living example of our belief that any man can achieve fortune through hard work and wise use of his money.

The importance we attach to money in our life can be demonstrated by quoting some of the ideas and attitudes many Americans hold: "Money talks." "If you're so darn smart, why aren't you rich?" "Money isn't everything, but it's way ahead of whatever is in second place." "That man is sound as a dollar." "You can't live on good will." "Never lend money to a friend." "Money isn't everything, but it helps." "Money may not buy happiness, but it sure prevents a lot of misery."

Questions: What role does money play in your definition of success? What are some of the ways that "money-getting" affects the lives of Americans? Can you give some specific examples of how money is used as a standard for valuing noneconomic behavior in our society? (For example, "That man's word isn't worth a plug nickel.")

* * *

Is it true, as some psychologists and sociologists have charged, that to be a success you have to "market" or sell yourself -- to shape your identity in order to become "a package" that is demanded in the manpower market? Should life be a "nightmare" in which men and women do not live as they wish, but instead are just playing roles? In a "rat race" to achieve financial success and its status, prestige, and power, do we lose sight of what is really important to each of us?

Franz Alexander, a psychologist-philosopher, thinks we do get caught up in a rat race and lose sight of what is important to us. He says that:

> "...physicians, lawyers, engineers, bankers, advertising men, teachers, and laboratory research men of universities, students, and clerks -- engaged in a marathon race, their eager faces distorted by strain, their eyes focused not upon their goal, but upon each other with a mixture of hate, envy, and admiration. Panting and perspiring, they run and never arrive. They would all like to stop but dare not as long as the others are running.
>
> "What makes them run so frantically, as though they were driven by the threatening swish of an invisible whip wielded by an invisible slave driver? The driver and the whip they carry in their own minds. If one of them finally stops and begins

leisurely to whistle a tune or watch a passing cloud or picks up a stone and with childish curiosity turns it around in his hand, they all look upon him at first with astonishment and then with contempt and disgust. They call him names, a dreamer or a parasite, and others. They not only do not understand him -- they not only despise him but 'they hate him as their own sin'.

"All of them would like to stop -- ask each other questions, sit down to chat about 'small things' -- they all would like to belong to each other because they feel desperately alone, chasing on in a never-ending chase. They do not dare to stop until the rest stop lest they lose their self respect, but they know only one value -- that of running -- running for its own sake."

Questions: Do you agree that some workers "market" themselves in the sense described above? Do they engage in a "rat race" in the manpower market? What evidence do you have to support your view? What is good or bad about "marketing" yourself and running a "rat race"?

* * *

What have we learned about success? Most Americans think of success as a good and worthy goal. Status, prestige, and power are the rewards we give the successful -- especially those who are financially successful. Though we tend to identify success with making money, there are other valid definitions of success. Our concern with financial success

"This makes it all worthwhile. It's what makes America great!"

may affect many areas of our lives. Money may become a measuring stick by which we judge and evaluate the worth of a man and many aspects of our lives. In our hot pursuit of success, we may lose sight of some of the more important things in life and become a different type of person than we really intended. But, if -- recalling the opening quote from Henry Thoreau -- we do march to the beat of "a different drum", we will doubtless find once again that "there is no such thing as a free lunch". The cost of following your own values includes not only financial sacrifice but also a certain loneliness that goes with not keeping pace with your companions.

* * *

Many Americans might be upset by some of the ideas that social scientists have on money-getting, success, and the roles that people play in our society. In today's lesson, we ask serious questions about some of the traditional goals and values of the American people. Whether you personally accept these values, or find yourself more in agreement with the views of some of the critics, these <u>are</u> the kinds of questions that young Americans in an open society should be asking themselves.

* * * * * * * * * *

## Today's Lesson in Brief

Although success can mean different things, many Americans identify it with money and material possessions. This concern with financial success influences the way we look at man and his world. In America, each individual is free to decide for himself what his goals and values will be. The way you define success may have an all-important effect on your life.

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## Financing Education

Education is an investment in human resources that yields benefits and also involves financial costs. In 1967, the American people spent $50 billion for education, more than 6% of our Gross National Product. Three-fourths of the costs of education are paid through government budgets. Local governments spend more money for education than the states or federal government; and spending for schools is by far the largest item in the budgets of local governments in the United States. As a citizen, you will be able to make better decisions about education and schools if you understand both the costs and benefits involved.

* * * * * * * * * *

In our earlier lessons, we focussed attention on the benefits of education, both to the individual worker and to the economy as a whole. We learned that in general the more schooling a person has, the higher his earnings. We also learned that approximately one-fourth of the real growth of production in the U.S. economy in recent years is a direct result of the improved education of American workers. Today, we want to look at the costs of education and find out how much money is spent each year on education, where the money comes from, and what problems and issues arise in financing education.

* * *

First, let's sketch a background picture of education in terms of the number of schools, students, teachers, and educational officials in the United States (and in Ohio). This will help us to appreciate the enormous size and the many dimensions of the "education industry". In the 1966-67 school year, three Americans out of every 10 in the nation were engaged full-time in educational activities -- a total of almost 60 million students, teachers, and administrators. There were in the United States, a total of:

*** 93,000 elementary schools
31,000 secondary schools (junior and senior high schools)
2,200 colleges, universities, and junior colleges

*** 37,000,000 elementary school students (through grade 8)
13,000,000 high school students
6,000,000 college students

*** 1,200,000 elementary school teachers
860,000 high school teachers
470,000 college teachers

There were in addition 170,000 school and college administrators and supervisors, and 660,000 school board members and state and college board members. In Ohio, there were 5,000 elementary and secondary schools; 2.7 million students; and nearly 100,000 teachers. More than four out of five students were enrolled in public schools (operated by local or state governments), with the remainder in non-public schools such as those operated by the Roman Catholic Church.

* * *

Questions

1. How many men and women are employed as teachers in the U.S. economy?
   _____

2. What is the Student-to-Teacher ratio in Ohio's elementary and secondary schools? Answer: An average of _____ students for each teacher.

* * *

Now let's turn to the question: How much money is spent each year on formal education in the United States? Table I provides figures showing that total direct outlays for formal education in the 1966-67 school year amounted to nearly $50 billion and that two-thirds of this was spent for elementary and secondary schools.

Table I. DIRECT COSTS OF FORMAL EDUCATION IN THE U.S., 1966-67 *
(billions of dollars)

| Item | Total | Elementary and Secondary Schools | Higher Education |
|---|---|---|---|
| Local governments | $16 bil. | $15½ bil. | $ ½ bil. |
| State governments | 15 | 11 | 4 |
| Federal government | 6 | 2 | 4 |
| Student tuition and fees | 4 | 1 | 3 |
| Contributions & Earnings of educational institutions | 9 | 3 | 6 |
| | $49 bil. | $32 bil. | $17 bil. |

* These figures do not include the indirect opportunity costs of education: approximately $25 billion that students could have earned if they were employed in the manpower market rather than being enrolled in school. Nearly all of the state outlays for elementary and secondary education were in the form of money given to local school districts to be spent for operating schools in the local communities.

SOURCE: Adapted from Economic Report of the President, 1967, p. 144.

Average expenditure per pupil for public elementary and secondary education in the United States amounted to $641 in 1965-66. About five-sixths of this amount was for "current operation" of the schools, such as teacher salaries and operation and maintenance of buildings. (The remainder was spent for construction of new buildings, interest on school bonds, etc.) Educational expenditures per pupil in Ohio were about 5% below the national average.

* * *

Questions

1. How much money in total was spent in 1966-67 for elementary and secondary schools in the U. S.? Answer: $_____ billions.
2. What fraction of the total cost of formal education is paid for by the federal government? Answer: _____.
3. Compute Ohio's average expenditure per pupil for 1965-66 from the data given above. Answer: Approximately $_____ per student.
4. Take the figure for Ohio (#3 above) and divide it by 200, which is the approximate number of school days in the year. (Answer: $_____). The answer you get is the amount of money that is invested each day in your education. Does this seem to you to be a good investment?

* * *

Where does the money come from to pay our nation's $50 billion annual education bill?

As Table I indicated, part of the money comes from student tuition and fees, and from contributions and earnings of educational institutions (such as corporation gifts to universities and the annual interest and dividends that colleges receive on the bonds and stocks they own). The bulk of the money, however, comes from taxes.

As we learned earlier in the course, taxes are payments made to government units (states, cities, counties, school districts, the federal government) by individuals and business firms. There are many different kinds of taxes. (One of the nation's large industrial corporations reported recently that it must fill out 5,800 tax reports every year to pay 40 different taxes to local, state, and federal government!)

The most important tax for education is the property tax collected by local governments. This is a tax based on the value of land, buildings, and certain equipment owned by individuals and business firms. If your family owns the house you live in, for example, you probably pay property tax of $200 to $300 or more each year. Most of this money goes to the local school district to help pay teachers' salaries and other operating costs of the schools. In addition to local taxes (mostly based on property), the schools also receive money from the state government, according to standards set up in each state. (State governments contributed about two-fifths of school costs nationally in 1965-66, although the proportion in Ohio was much lower.) Where do states get their dollars? Again, the answer is taxes. Most of the states (including Ohio) collect sales taxes, and a large majority of states (but not Ohio) collect income taxes. Most of the money that the states contribute to the schools comes from these taxes.

Finally, the federal government in the past few years has started making financial contributions to the state departments of education and to local schools. During the past 10 years, Congress has passed several acts that provide billions of dollars for elementary and secondary schools, as well as for colleges and universities and other educational programs. During the 1960's, the principle of "federal aid to education" apparently is gaining acceptance by the American people.

* * *

Now, what have we learned about the way education is financed in the United States? First we learned that education is "big business" in America. Sixty million people are engaged full-time in educational activity, and about $50 billion is spent each year as an educational investment in human resources. Second, education is financed and managed almost entirely by local school districts and state governments. Third, the money to pay for education comes mainly from taxes -- chiefly local property taxes and state sales (and/or income) taxes. Only in recent years has the federal government started contributing significantly to the support of our schools.

* * *

The statistics that we have viewed certainly show that in education there is no such thing as a free lunch. The direct financial costs are high ($50 billion a year), and the opportunity cost of student earnings involves many billions more. In order to make wise decisions about education and the schools, we need to understand both the benefits and the costs of this form of investment in human resources. Our goals are to provide educational opportunity for every American; to get the largest possible economic returns; and to promote the human development and well-being of our people.

* * *

## Discussion Questions

1. Often when a "local school levy" is placed on the ballot (that is, a proposal to increase local property taxes to provide money for schools), it is defeated by the voters. Yet many of the people who voted against the school levy say they are in favor of "good schools". How do you explain their position?
2. Is it better to provide money for elementary and secondary schools out of local property taxes, state sales taxes, or federal income taxes?

* * * * * * * * * *

## Today's Lesson in Brief

Education is one of America's biggest investment industries, involving outlays of $50 billion a year. Three-fourths of the direct cost of education is financed by taxes, including property taxes collected by local school districts. Citizens can make more intelligent decisions about elementary, secondary, and higher education when they know how education is financed.

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## The Benefits and Costs of Education

"An affluent democratic society can grow from strength to strength if it has the wisdom and the courage to invest in the development of its people."

— Eli Ginzberg

Education provides economic benefits to the individual and to the economy as a whole, and also provides certain noneconomic benefits to the individual and society. Because the educational process makes use of productive resources, costs are necessarily involved in all educational activity. As long as benefits exceed costs, investments in education represent an efficient use of resources. Actual rates of return on investment in education are difficult to compute because some types of benefits, although extremely valuable, are hard to measure.

* * * * * * * * * *

In this lesson, we shall review some of the most important ideas and facts that we learned in previous lessons about the economic value and the costs of education. Then we'll consider some additional ideas on the noneconomic benefits that result from education. We'll learn the meaning of two very important economic terms: "social costs" and "social benefits".

Before reading ahead in this lesson, take a couple of minutes to jot down six important facts and ideas that you have already learned concerning the economic value of education:

1)_____

2)_____

3)_____

4)_____

5)_____

6)_____

***Put a big "X" next to the item above that is most interesting and important to you, personally. Question: Why did you mark that particular item?

Your list of important ideas and facts about the economic value of education might look something like this:

1 -- Workers with more education generally have higher earnings.
(Lifetime earnings of high school graduates are $35,000 higher than dropouts; lifetime earnings of college graduates are $138,000 more than high school graduates.)

2 -- Education adds to the "skill bank" or "human capital" of a worker, increasing his employability, productivity, and earning power.

3 -- Rates of return on investment in human resources are frequently higher than rates of return on investment in nonhuman capital such as machinery, buildings, and equipment.
(Rates of return on the 8th year of schooling have been estimated at about 30%; returns on the 4th year of high school at 15%; and returns on the 4th year of college at 15%. Rates of return on investments in nonhuman capital are often below 10%.)

4 -- Improved education of the work force has contributed about one-fourth of the total growth in real national production.
(Increased schooling of workers contributed an estimated 23% of total growth of national production between 1929 and 1957.)

5 -- Workers in certain skilled occupations have higher lifetime earnings, even though they have less formal education, than more highly educated workers in other occupations.
(For example, plumbers and electricians with a high school diploma earn more than clerical workers and carpenters who are college graduates.)

6 -- The direct costs of formal education in the United States are about $50 billion a year and are financed chiefly by state and local government taxes.

* * *

What are some of the implications of these facts about the economic value of education -- for the local community, the nation as a whole, and for you personally? How can we use the knowledge we have gained about the costs and benefits of education?

Knowledge of the economic value of education helps us to make more intelligent plans and decisions, as individuals and as a group. Why? Because this knowledge tells us more about the consequences of certain actions (such as completing more years of schooling); knowing the results of our actions helps us make wiser judgments about the methods we use to achieve our goals. Research discoveries in the 1960's indicate that we can achieve the goal of increased national production by investing in the education of our workers. Individual workers can achieve their personal

goals of increased earnings and economic security by accumulating more human capital. Unemployment and poverty can be reduced by improving the education of the work force.

* * *

Question: In the quotation at the beginning of this lesson, Professor Ginzberg suggests that it will take both "wisdom and courage" on the part of the American people to invest in the development of our people. In view of the above discussion, do you feel that we now have the necessary knowledge and wisdom to make intelligent decisions about investments in human resources? Please explain your answer.

* * *

The research findings on the economic value of education have stressed benefits and costs that are fairly easy to measure, such as individual earnings and direct expenditures on education. However, there are additional benefits of education -- both economic and non-economic -- that need to be recognized. (There are also some additional costs, such as the opportunity costs of students who could be working and earning income if they were not enrolled in schools, the discomfort and anxiety that some students feel because they must attend school, and the SOCIAL COSTS involved in overcrowded schools with standardized courses and lack of personal contact between teacher and student.

We know, for example, that education can bring satisfaction and pleasure to a person as well as increase his productivity and earnings. Education can open up new areas of human development such as the ability to appreciate good music, paintings, literature and poetry, and engage in philosophical or spiritial reflection. These are consumer-type benefits. In other words, education can not only improve our ability to make wise decisions about production, but also about consumption (the things we consume and how we consume them) and the way we use our free time.

Beyond these noneconomic (so-called psychic income) benefits to the individual, there are also benefits that "spill over" from the educated individual to improve the well-being of other members of society. These are called SOCIAL BENEFITS. One example is the direct contribution that education makes to increased national production; another is the indirect contribution that education makes to the advancement of knowledge. There are also social benefits that lie outside the usual boundary lines of economics. For example, citizens who can read and write and understand economic and social issues are able to vote more intelligently in local, state, and federal government elections. An educated population is a basic requirement for political democracy. Moreover, there is less crime, mental illness, juvenile delinquency, and physical violence when people are better-educated. Parents with more education are able to give their children certain "cultural advantages" in their family life.

Because these "psychic benefits" and "social benefits" of education are so great -- the social <u>costs</u> are relatively minor -- it will be impossible to get an accurate measure of the rate of return on investments in education until ways are found to include the <u>full</u> benefits in our calculations.

* * *

<u>Discussion Questions</u>

1. In what sense do the rates of return on investments in education that we have seen tend to understate the value of education?

2. Which benefits of education do you think are more important, the <u>economic</u> or <u>noneconomic</u>? Why?

3. In your judgment, which benefits of education are more important, the <u>individual</u> benefits, or the <u>social</u> benefits? Why?

4. Referring again to Professor Ginzberg's quotation at the beginning of this lesson, in what sense will it require <u>courage</u> to make the appropriate investments in our human resources?

* * * * * * * * * *

<u>Today's Lesson in Brief</u>

The benefits that result from education include increased earnings for the <u>individual</u> worker and consumer-type benefits related to his personal development and satisfaction. Education also results in <u>social benefits</u> that spill over from the individual and are enjoyed by the community as a whole. <u>Economic</u> examples include increases in Gross National Product and advances in knowledge; <u>noneconomic</u> examples include better-informed, more responsible citizens and less anti-social behavior. The <u>costs</u> of educational activity include direct tax costs, indirect costs of foregone earnings, and such psychic and social costs as personal discomfort or sacrifice and crowded schools. Many estimates of the rates of return on investment in education are understated because they fail to include individual consumer-type benefits and social benefits.

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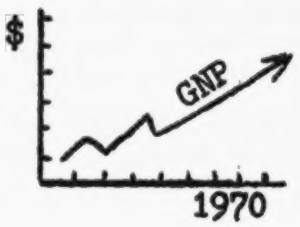
## Will Economic Growth Solve All Our Problems?




Economic growth is the steady increase of Gross National Product per person, year after year. It means more output of goods and services and therefore increased real income available for the people in our economy. If our recent growth rate of 2½% a year (increased GNP per person) continues, incomes will <u>double</u> every 28 years. Will this growth of production and income solve all our economic problems?

* * * * * * * * *

We have learned that every economic system faces <u>three basic problems</u> and must somehow find answers to the three fundamental economic questions:

1-- HOW MUCH will be produced? (What will be the <u>overall level</u> of economic activity and GNP?)
2-- WHAT will be produced? (What specific kinds of goods and services will be produced? What will be the <u>composition</u> of our GNP?)
3-- FOR WHOM will the income be produced? (How will we share our production among the various members of society? What will be the <u>distribution</u> of our nation's income?)

The specific goals we establish for our economy serve as targets to aim for in solving the basic problems. These specific goals include Full Production, Stable Economic Growth, Freedom of Choice, Equality of Opportunity, Economic Security, and Economic Justice. In addition -- because we are part of the world economy and "the world community of man" -- we also have certain problems and goals that concern our relations with other countries, which we summarize under the heading "International Balance".

* * *

Once again, let's review our record of economic growth. Between 1929 and 1955, total Gross National Product of the United States grew from $100 billion to $400 billion (in current prices). During the 10-year period from 1956 to 1966, <u>real</u> GNP per person increased from $2,600

to $3,300 -- an average increase of about 2½% a year. Total GNP rose from $420 billion in 1956 to $740 billion in 1965; and by 1970, GNP (in current prices) will approach <u>one trillion dollars</u>! Real growth enlarges the economic pie and makes it possible for every American to have more income and more goods and services. In 1963, GNP per person in the United States ($3,000) was <u>30 times</u> as high as GNP per person in the underdeveloped countries of Africa and Asia ($100 per year) and nearly <u>10 times</u> as high as the average income in Latin America ($330 income per person a year).

The central question we want to raise in today's lesson is this: If we achieve the goal of Stable Economic Growth, will this mean that our <u>other</u> goals also will be achieved, more or less automatically? Will growth solve all our problems?

Before answering, let's consider a partial list of economic problems facing the United States in the late 1960's (write down some additional problems you can think of):

-Poverty
-Unemployment
-Inflation
-High Taxes
-City Slums
-Rapid Automation
-Overpopulation
-Government Controls
-War (hot and cold)
-Racial Discrimination
-Pollution of Air and Water
-Demonstrations and Riots
-Physical & Mental Illness
-Gold Losses
-Crime
-Monopoly (too much power in the hands of business corporations and labor unions)
-
-

* * *

<u>Question</u>: Which one of these problems do you personally think is most serious? Put a big check mark (√) next to it and then explain what makes it an <u>economic</u> problem, and why you think it is a <u>serious</u> problem.

* * *

Now let's study why it is that economic growth might be expected to solve many of these problems. What's so good about growth?

First of all, growth means that more goods and services are available to satisfy <u>consumer</u> wants and more resources are available for <u>investment</u> (in machinery and equipment as well as in human resources) and for <u>government</u> services (such as military defense, education, building highways, and improving our natural resources). Economic growth increases our <u>power</u> to do more things, because growth provides us with more resources, goods, and services. One very important reason why both the United States and the Soviet Union give such a high priority to economic growth is because growth

allows a country to strengthen its military defense (and improve its competitive advantage in the space race) as well as to provide a better standard of living for its people. A rich country has more control over its present and its future well-being than a poor country, just as a rich man has more control over the world he lives in than a poor man has.
Question: In what sense is it true that a rich country has more control over its "destiny" than a poor country?

Civilian Goods & Services
("Butter")

Military Goods & Services
("Guns")

* * *

But does economic growth solve all our problems? You can probably answer this question for yourself. The record shows that our economy has grown in the past -- yet many problems remain, such as poverty, inflation, and war. Economic growth in the future may very well help us to solve some of our remaining problems, but evidently growth does not automatically cure all of our ills.

We can illustrate this very briefly by looking again at the three basic questions every economy must answer:

Question #1 -- the OVERALL LEVEL of economic activity: In spite of the fact that we enjoyed rapid growth in the U.S. economy in 1966 and 1967, the problems of inflation and unemployment were not solved. The general level of prices (Consumer Price Index) rose more than 3% a year, which meant that the purchasing power of the dollar went down because of inflation. And even as the economy approached "full employment", nearly 3 million workers on the average were jobless. Unemployment rates for teenage negro workers ranged from 15% for 18 and 19-year-old males to 35% for 16 and 17-year-old girls!

Question #2 -- the COMPOSITION of production: In 1966, when GNP was over $740 billion, one-twelfth of this total ($60 billion of goods and services) was for national defense and not available for personal consumption or business investment. (We spent more money and resources on war and defense in 1966 than we spent on the education of all 56 million students enrolled in American schools and colleges that year.)

Question #3 -- the DISTRIBUTION of income: Although we were producing enough goods and services in total to provide $10,000 for each family in the United States, the fact is that 30 million Americans were living in poverty -- with family income from all sources below $3,000 for the year. Nearly 15 million American children under the age of 18 were growing up in these poor families.

And to add a final note of "gloom and doom", in the midst of our rapid economic growth and record-breaking prosperity in 1966-67 we lived in a world threatened by nuclear war, population explosion, and growing resentment over the widening gap between the rich nations and the poor nations.

The economic outlook for the future may seem dismal or bright, depending on your "world-view". Two facts stand out, however: First, that knowledge is expanding rapidly; men and women are acquiring skills and tools that make them the most productive human resources in history. And second, knowledge is power; the growing productive power of man can be used wisely or foolishly, constructively or destructively, whatever men choose and allow.

Questions

1. What is meant by economic growth, and what are the benefits of economic growth? (List at least three). Can you think of any disadvantages of economic growth?
2. Explain how economic growth might solve one or more of the following problems in the United States: Unemployment, Slums, Pollution, Riots.
3. Give some examples of what you think would be a wise and constructive use of the additional output resulting from economic growth. Can you think of some examples of destructive or foolish uses of our increased production?
4. Looking beyond the domestic problems of the United States, which worldwide problem do you personally feel will be most serious in the next 10 years? Why?

* * * * * * * * * *

Today's Lesson in Brief

Economic growth results in the increased production of goods and services available for consumers, business investment, and government. In spite of steady growth, several economic problems remain to be solved in the United States, including: Poverty, Inflation, Unemployment, War, Increasing Population, Monopoly, Pollution of the Environment, and others. Whether these problems will be solved depends on the decision-making ability and the determination that you and your fellow citizens demonstrate in the 1970's and beyond.

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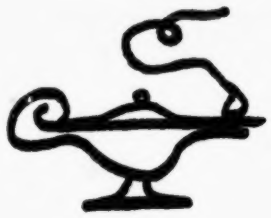

## Value Judgments: Is It Possible to Know What's Good?

"Values" are standards that people use to make choices and decisions about important matters. A value implies goodness or badness. We make value judgments every day, and our lives are influenced a great deal by the values we hold and use. We acquire our values from parents, church, community, and other sources. We may also be able to learn useful values through careful reasoning and a factual study of man and his social and physical world.

* * * * * * * * * *

We have made frequent use of the Five Steps in Economic Reasoning in our study of the economy and man's role as a worker. Do you recall the five steps? Write them down in the space provided:

1--

2--

3--

4--

5--

Step #2 -- identifying your goals and underlying values -- is extremely important in the decision-making process. We have discussed goals and values (along with value judgments and value conflicts) many times in this course. Today, "values" will occupy center stage as we attempt to answer the question: Is It Possible to Know What's Good?

* * *

Whenever people talk about something being "good" or "bad", they are discussing values. We can define values as standards that people use to make choices about important matters. Some examples are honesty, efficiency, greater equality, good health, and human development. A value always implies a preference based on judgments about the goodness or badness of a thing. For example, when you choose to buy one sweater (blue, wool, price $8) rather than another sweater (green, orlon, price $10) you are making a value judgment that -- all things considered, such as price, quality, personal tastes -- the blue one has more "goodness"

for you than the green one. (You certainly wouldn't choose the blue one because it had more "badness", would you?)

The sweater example may seem insignificant to you, but it does illustrate the use of values in making choices. Let's consider two additional cases.

CASE #1 "The Value of Color"

The year is 1982. You are personnel manager of the Ace Manufacturing Co. Two men apply for a production job which is open. Both men are high school graduates with good backgrounds, and they seem equally qualified. One man is white, the other is negro. You decide to hire the white man rather than the negro -- because for one reason or another -- you favor whites over negroes.

Comment: What you have done is to choose a certain course of action (hiring the white worker) on the basis of a value judgment. The value of "whiteness" is used to make a choice concerning which man will get the job.

* * *

CASE #2 "Answers and Questions"

Sally couldn't help but notice that her friend and classmate, Fred, was cheating during the math test. He kept looking into his shirt pocket, which contained all sorts of interesting facts neatly printed on a small card. At home that night, Sally wrestled with her conscience. What should she do, if anything, about Fred's cheating?

Question: What would you do? What specific values do you suppose Sally thought about as she considered what action to take? Do these values clash with each other?

* * *

As a worker-consumer-citizen, you will have to make many value judgments in your lifetime. Some of these will mainly affect your own personal situation, such as the choice of a job and a place for you and your family to live. Other value judgments will affect the lives of many people, such as the way you vote on key issues in local, state, and national elections and the kinds of political candidates you support. You will be making value judgments about the way we distribute tax burdens; the power that is given to government agencies, labor unions, and business corporations; policies to reduce pollution and poverty; and our relations with other countries (war and peace, economic assistance, cooperation in space exploration).

* * *

How important are value judgments in economics? Several years ago a committee of businessmen and unversity presidents asked the question: What is the most important economic problem facing the United States in the next 20 years? This is how one economist replied:

> "The most important economic problem in any age is to know what we want, to define useful and worthy ends, and to balance our efforts among them in due proportion."

In other words, economic life is concerned not only with how our goals are achieved, but also with the question of what the goals ought to be. Man does not have to simply drift with the current. Because man has knowledge and power, he is able to choose a wide variety of goals -- based on his values -- and in fact cannot avoid the responsibility to do so. In a statement made on educational television in 1962, President John F. Kennedy pointed out that:

> "Economic decisions are man-made decisions. We are to a considerable extent masters of our own economic destinies."

* * *

Questions:

1. What does President Kennedy's statement imply about the importance of values in making economic decisions?

2. What are the sources of our values? List some specific values and tell where they come from.

3. Do you believe that values change over the years, or that values are the same forever? Give some economic and noneconomic examples.

4. If two people disagree about a value question -- such as capital punishment and the value of human life -- how can they work out their disagreement and decide which value is better?

* * *

Question #4 above illustrates one of the most difficult problems that men and women face in their lives. It is a problem that no scientist, teacher, philosopher, or any other scholar has yet solved. Knowledge of the good has been called "the ultimate purpose of all education". How can the most useful and "true" values be found? How

can value differences be settled? Here are some suggestions that may be helpful to you in pursuing a rational analysis of values:

First: Keep an OPEN MIND. Don't be "pig-headed". Even if you are "certain" that you are right, consider that you might possibly be wrong. (Here is a rule you might follow: "A value judgment is as good as the reasons for it, and as weak as the reasons that support alternative views.")

Second: Try to CLARIFY THE ISSUES, to find out exactly what it is that you disagree on. Don't be "muddle-headed". (Frequently, after much arguing and confusion, it turns out that there is really no disagreement after all, only misunderstanding.)

Third: Look at the FACTS, and check the accuracy of your own information and data. (Many so-called value disputes are really disagreements about the facts. Once the factual errors are eliminated, the dispute is ended.)

Fourth: Check to be sure your LOGIC is sound and your values are consistent. (For example, in George Orwell's famous book, Animal Farm, all the animals were in favor of equality, but some animals wanted to be "more equal" than others.)

Fifth: Be sure that you APPLY your values to the methods used to achieve your goals as well as to the selection of the goals themselves. (For example, if your goal is to teach a group how democracy works, but you order everyone around like a dictator, you fail to follow your value of democratic procedure.)

* * *

Questions

1. "On a question of values, one man's opinion is as good as another's." Do you agree with this statement, or disagree? Why?
2. How do you deal with a person who says: "Don't try to reason with me, my mind's made up!"?
3. If the Russians agreed to use the rational method of analyzing values, and the Americans did the same, do you think we might be able to clear up some differences between the two countries.

* * * * * * * * * *

Today's Lesson in Brief

Values are standards that people use to make choices and decisions about important matters. A value implies goodness or badness. Values play an important role in the selection of economic goals. A rational analysis of values requires that you keep an open mind, clarify the issues, verify facts, follow the rules of logic and consistency, and apply your values to the methods used in achieving your goals as well as to the selection of the goals themselves.

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## World-view for a Changing World

"The future belongs to those who prepare for it."

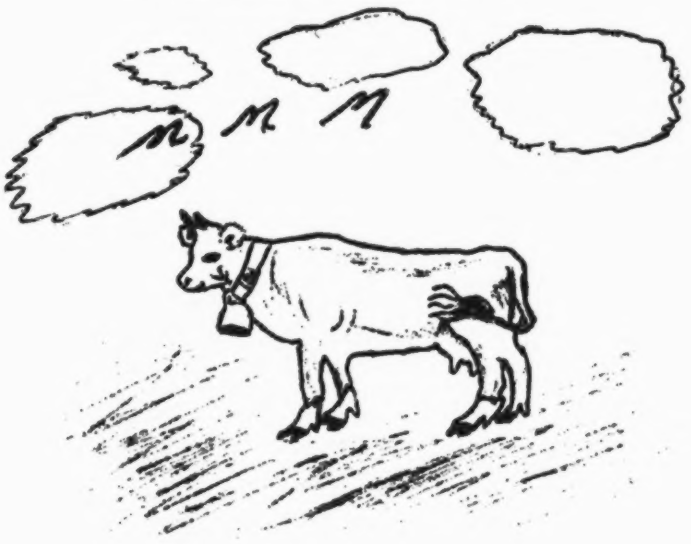
-- Anonymous

In order to prepare yourself for the future -- for effective participation in economic life and for successful living in a general sense -- at a minimum you will need good health, education, and a realistic "world-view" that is oriented to the future. This world-view must accept the fact that many things are changing in the world, including our technology, resources, and institutions. The individual who can adjust effectively in a changing world is able to avoid many problems, fears, and burdens. He can also benefit more fully from the opportunities that progress and change may offer.

* * * * * * * * * *

Today's lesson is "philosophical". (The word philosophy means the "love of wisdom" and refers to the study of knowledge.) Most people have a "philosophy of life" that includes their beliefs about the meaning of life and what things are most important in their own lives. Don't be shocked or surprised to find that economics is closely related to philosophy. Most professional economists have earned a university degree called "Doctor of Philosophy" (Ph.D.). Adam Smith, the "father of economics" was a moral philosopher in Scotland before he became interested in economic science. Twenty years before publishing his famous book, The Wealth of Nations, in 1776, Professor Smith wrote a book on virtue and ethics entitled The Theory of Moral Sentiments.

Let's explore some ideas concerning an individual's world-view (the way he looks at the world and interprets what he sees), and the subject of change. We'll begin with a story about a cow.



### "The Shafter Cow"

"At exactly 5:13 a.m. on the 18th of April, 1906, a cow was standing at 123-degrees, 20-minutes West longitude, 37-degrees, 58-minutes North latitude -- somewhere between the main barn and the milking shed on the old Shafter Ranch in California, minding her own business. Suddenly, the earth shook, the skies trembled, and when it was all over, there was nothing showing of the cow above ground but a bit of her tail sticking up.

"For the student of change, the Shafter cow is a sort of symbol of our times. She stood quietly, thinking such gentle thoughts as cows are likely to have, while huge forces beyond her understanding built up all around her -- and, within a minute, destroyed a city and swallowed her up." (From "Kaiser Aluminum News", 1966.)

Questions

1. What famous disaster occurred in northern California in 1906 that "destroyed a city and swallowed up" our friendly cow?

2. Explain the sense in which the Shafter cow is "a sort of symbol of our times". List two or three of the "huge forces" that are building up around us in the United States at the present time?

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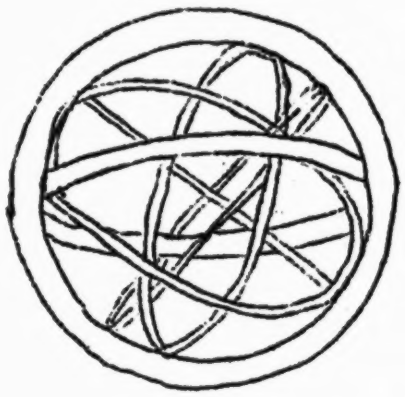
* * *

How do people view economic change? What is your own personal world-view? Before you answer, read the following excerpt (with a few changes) from a book entitled Economics and Man:

"In economics, the general view that you have of the whole economic system is the most important element of your economic thought. If you think the tendency to bargain and trade is 'original human nature'; if you think that the rational search for pleasure and the avoidance of work and pain are the mainsprings of human action; if you think that the market determines the natural and just way of distributing income; then you have one view of the economic world, and this view may affect your beliefs about how to run the government (what manpower policies to follow, and how to conduct a war against poverty).



"If, however, you have different ideas -- that capitalism is a growing, changing institution that has developed out of former ways of organizing production; that man's actions are only partly rational; that the things we consume (and the work we do) are dictated by our institutions rather than by our rational search for pleasure -- then you have a quite different world-view, and this may affect your attitudes toward economic change and how to solve particular economic problems."

Questions:

1. Do you believe that it is "human nature" to buy and sell, seek pleasure, and avoid work? Explain your answers.

2. Do you agree that "capitalism is a growing, changing institution"? Give reasons for your answer.

3. How might your solution to the problem of poverty differ depending on what your economic world-view happens to be. (Hint: What are some views of "human nature" and the causes of poverty?)

* * *

Just as nobody can know for sure exactly what the future will bring, neither can anyone tell you exactly what the "correct" world-view is for you. This is a matter of personal philosophy that develops and grows as you learn more about the world and your place in it. Are there any ideas or clues that might be helpful in searching for a useful world-view? Are there certain facts that we have learned about man and the world he lives in that are relevant?

We are pretty sure the answer is yes. For example, we can look into the future and predict with a great deal of confidence that life in the year 2017 will be a lot different than life in 1967. The work that men and women do, the goods and services they consume, the methods of production will all be vastly different. Moreover, since the rate of change in technology and economic life seems to increase each year, we can expect life 50 years from now to be much different -- with changes even greater than occurred between 1917 and 1967.

How will it be possible to "renew" yourself to keep pace with change? How can you adapt yourself and adjust to the new demands that will be placed on you as a worker, consumer, citizen -- and as a person? How can you face the future with optimism and hope, rather than with pessimism and fear?

Previous lessons in this course have suggested partial answers to these questions. Certainly it will be easier to face the future if you have acquired skills and understanding, especially skills that are basic and durable, versatile, transferable to new work, and open-ended so that you can continue learning throughout your lifetime. It will be easier to adjust to the future if you develop and maintain good health, both physical and mental. And, finally, if you expect change, and if you are oriented to the future rather than the past, you will have attitudes and a world-view that makes adaptation to change much easier for you.

If you approach the future creatively and with enthusiasm, you will be better able to make the future serve your needs and desires instead of feeling that you are the helpless victim of "huge forces outside your understanding" and beyond your control.

* * *

## Discussion Questions

1. "Fear of the future gives opportunity the face of disaster." What do you think this statement means?

2. How can you prepare yourself now to face the new demands that will be placed on you in the 21st century?

3. What are some of the problems that our country as a whole will face because of changes that are occurring in our economic life?

4. What can you do as an individual, and what can we all do together as a society to avoid being "swallowed up" by vast changes in our way of life?

* * * * * * * * * *

## Today's Lesson in Brief

Technology, economic resources, and the institutions of our society have changed a great deal in the past 50 years. We can expect the world to continue changing in the future. In order to meet the challenges of change, and take advantages of opportunities provided by technological progress and economic growth, you will need to develop skills and understanding, good mental and physical health, and a world-view oriented to the future rather than to the past.

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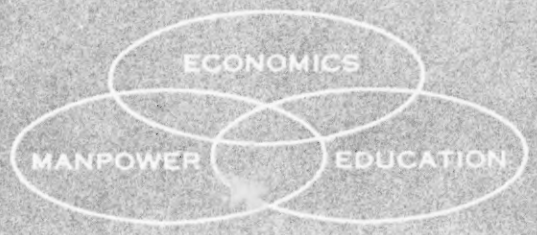
# APPENDIX II

## *TEACHER MANUAL—*

## MANPOWER & ECONOMIC EDUCATION:

### Opportunities in American Economic Life




*Teacher Manual*

# MANPOWER & ECONOMIC EDUCATION

## Opportunities in American Economic Life

Robert L. Darcy

Phillip E. Powell

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JOINT COUNCIL ON ECONOMIC EDUCATION, 1212 AVENUE OF THE AMERICAS, NEW YORK 10036

# TEACHER MANUAL

for

# MANPOWER & ECONOMIC EDUCATION:

## Opportunities in American Economic Life

By

ROBERT L. DARCY and PHILLIP E. POWELL

(Revised Experimental Edition)

Joint Council on Economic Education
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April 1968.

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LPLU

# TO THE TEACHER

In our Preface to MANPOWER & ECONOMIC EDUCATION: Opportunities in American Economic Life, we stated that although the lessons are carefully structured, this course is not designed to teach itself. We believe the classroom teacher will play a crucial role in determining the success of the course in terms of the immediate and lasting value it will have for students.

A glance at the Table of Contents identifies what we have included in this manual for the express purpose of aiding the teacher. Note that there are eight "Overviews" to lend perspective and continuity to the course. For each individual lesson, there is a page or more of supplementary information (Teacher Materials, or "TM"), including commentary, references, answers to questions posed in the student lessons, and in some cases additional questions for class discussion. Appendix I provides an annotated bibliography of publications that we have identified as appropriate for "A Basic Manpower Economics Library". (Three additional appendices will be discussed below.)

In the Preface to MANPOWER & ECONOMIC EDUCATION -- which you may want to read again -- we indicated the initial field-testing of the course was conducted with eighth, ninth, and tenth grade students in three Ohio school systems during the 1967-68 school year. Lessons were handed out on a daily basis; and at the end of class, they were stored for future reference in the student's own three-ring binder. Each lesson was designed to be treated within a single class period, although there is no reason for strict adherence to this plan. Some teachers had their students read the "daily lesson" as homework prior to discussing it in class; others required no out-of-class study at all and simply had the students read and discuss the lessons together in class. Active student participation in reading and discussing the lessons was encouraged, for a major objective of the course has been to promote active student involvement in exploring the worlds of economics and work.

In the daily "TM's", there is a variability of style and format that reflects preferences of the respective authors. Reference to "page 2 in the lesson", etc., may be translated as: "the second page of the lesson". (In the original edition of the student materials, pages were numbered by individual lesson; not for the course as a whole.)

References are made in the TM's to authors and books in a manner suggesting that the teacher is conversant with these materials. The explanation is that teachers involved in the preliminary field-testing of the course were furnished with a complete set of all 26 publications listed in "A Basic Manpower Economics Library" (see Appendix I of this Teacher Manual) and had the materials available throughout the year. We would strongly recommend that every teacher of this course have at least a minimal manpower

and economics library in his classroom or office for reference and background reading. References are also made to "Psychological Dimensions of Work", Technical Paper #2 (Center for Economic Education, Ohio University, 1967). Copies of this background paper may be obtained from the Joint Council on Economic Education.

With only one exception, the lessons are self-contained, requring no supplementary materials of any kind. However, lesson #51 (First the Plan, Then the Job!) does require student quantities of a booklet entitled CHOOSING YOUR OCCUPATION (Career Guidelines for High School Students) published by the U. S. Department of Labor, Bureau of Employment Security, and available (often without charge) from the State Employment Service in your state. Contact either the State agency or the U. S. Bureau of Employment Security, Washington, D. C., well in advance to determine availability of the pamphlet for each of your students. Other free and inexpensive materials dealing with economics and manpower are also available from various private and governmental sources. Careful attention should be given to selection of supplementary material, however, in order to avoid publications that may be lacking in objectivity and balance, and also because the lessons themselves contain more than enough information, data, and concepts for most one-semester courses. Only if additional class time is available will it be necessary to schedule supplementary readings, speakers, class projects, etc.

Appendix II lists the titles and page numbers of the 75 student lessons in the same sequence in which they appear in MANPOWER & ECONOMIC EDUCATION. The lessons could be taught effectively in alternative sequences, according to a teacher's preference. Appendix III lists the 75 lessons grouped by major themes and provides an index to both the student and teacher materials. Appendix IV is an index of visual illustrations appearing in the lessons.

We hope that users of the instructional materials will keep in mind that the course is designed to enhance student awareness and stimulate exploration and discussion. "Over-teaching" should be avoided: full mastery of all the concepts, data, and analysis included in the course should not be expected of students. It is far better to stimulate lively and relevant discussion and to stress the main themes (identified in the "Abstract" and summarized in "Today's Lesson in Brief") rather than to squelch active student participation in the interests of thoroughness of treatment.

By no means is this a definitive course in manpower and economic education. It is a beginning, and preliminary evaluation suggests that the course has considerable value. We hope that, as you read and teach these materials, you will give us the benefit of your comments, suggestions, and recommendations for improving them.

April 1968

ROBERT L. DARCY
PHILLIP E. POWELL

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## Lessons #1 - 10 -- Overview and Continuity

The lessons in this unit introduce the students to some basic themes of the course -- World of Economics (lesson #2-7, 9), Occupations and Employment Trends (lesson #8), Nature of Work and Its Noneconomic Aspects (lessons #1, 10). These lessons ought to help students see the relevance of Manpower and Economic Education for their lives. They will also learn a number of key economic concepts and terms that will be used in later lessons.

The first lesson suggests a rationale for the whole course. The next six lessons acquaint the students with some of the basic terminology and analytical tools of economics. Lessons #8, 9, 10 present a brief insight into the world of work by examining some of the types of jobs that workers have and the economic and noneconomic reasons they are employed.

EDUCATION AND WORK: A MEANS OF DISCOVERING YOURSELF, lesson #1, is an introduction to the course that suggests that there are good reasons for studying manpower and economic education. The lesson also introduces some major themes of the course. The primary purpose of this lesson is to motivate the students. Hopefully they will see that the subjects discussed in this and subsequent lessons have relevance for them now and in the future.

Lesson #2 (WHAT IS ECONOMICS ALL ABOUT?) asks and answers a question which probably is a concern of many of the students. This lesson presents the basic framework (Resources, Technology, Institutions) which will be used throughout the course in studying the economic and noneconomic dimensions of our economy and world of work. It also discusses several key economic concepts that should be understood in order to have further discussions about the world of economics. This lesson should help students begin to develop a sense of what economics is concerned with.

WHAT ARE THE THREE BASIC PROBLEMS FACING EVERY ECONOMIC SYSTEM, lesson #3, considers the general situation that faces all economies. This lesson can help students see some of the common elements found in the world of economics.

Lesson #4 (ECONOMIC INSTITUTIONS) presents a fairly advanced discussion of economic institutions and their importance. To understand what institutions are, what role they play in our lives, and that they can be modified or changed is important in order to appreciate some of the insights offered by the course.

CAPITALISM: 'THE ANATOMY OF FREE ENTERPRISE', lesson #5, provides an overview of the institutional features of our economic system. The lesson ought to help the students gain a better understanding of some of the terms (market system, private enterprise, free competition, etc.) used to describe our economy.

Lesson #6 (THE CIRCULAR FLOW OF ECONOMIC ACTIVITY) introduces the circular flow model representing the market mechanism. The students should recognize that this is one of the key lessons in the course and that they will be using the circular flow analysis as a tool in several other lessons (e.g., #13, 17, 19, 66).

THE DIVISION OF LABOR AND ECONOMIC INTERDEPENDENCE, lesson #7, suggests that we all are a part of a highly organized and complex economy and that we can benefit individually and collectively if we know something about how our economy functions. The lesson's discussion of jobs, work, and the division of labor is also a lead-in to the next three lessons (#8, 9, 10) and their concern with manpower and work.

Lesson #8 (THE WORK THAT PEOPLE DO) has the primary purpose of demonstrating the relevance of manpower and economic understanding to students. Like lessons #1 and #2, it is motivational in nature. Students should start to see that there is a great number and variety of familiar and unfamiliar jobs awaiting those who have the qualifications that employers seek. However, it should also become obvious to students that in order to take maximum advantage of these employment opportunities, they must be informed about the manpower market and world of work. The concern with occupational opportunities that is found in lesson #8 is followed up in later lessons (e.g., #34, 35, 37, 45) with a more detailed treatment.

WAGES, EARNINGS, AND FAMILY INCOME, lesson #9, discusses the financial rewards that people receive from working on a job and is a next logical step in looking at the benefits we can get from successful participation in the manpower market. Later lessons (e.g., #28, 64) considers the financial gains received from employment in more detail.

Lesson #10 (THE JOY OF WORK) is an introduction to the noneconomic reasons for working. The purpose of this lesson is to make the students aware of the fact that man does not work for bread alone. The lesson can encourage them to start thinking about what nonfinancial rewards they expect to get from their jobs. A number of lessons (e.g., #29, 36, 39, 42) that appear later in the course discuss in more detail the subject of noneconomic rewards of work.

## #1 Education and Work: A Means of Discovering Yourself

This lesson introduces the students to some of the concerns and ideas they will be studying in the course. The purpose of the lesson is to help the student see that there is a need to think about their economic roles in life -- especially their income-earner or worker role. The lesson should suggest to the students that the types of things included in this course have relevance for their future.

There are a few terms in the lesson that may be unfamiliar to the students, but which we do not define. (For example, "manpower market" -- see "Manpower Market: Men and Jobs" lesson.) These and other new words will be carefully and fully explained in lessons that follow. Cases #1 and 3 are rewrites of narratives appearing in THE AMERICAN WORKER IN THE TWENTIETH CENTURY by Eli Ginzberg and Hyman Berman. Case #2 was adapted from the December 1967 issue of OCCUPATIONAL OUTLOOK QUARTERLY.

Answers to Discussion Questions. PAGE 2. #1, SUGGESTED ANSWER: Production (i.e., manufacturing automobiles); Employment (i.e., hiring people and bringing together the factors of production); Work ("My job is to weld the hood"); #2, SUGGESTED ANSWER: Answers will vary, but should suggest that the job doesn't fulfill all the worker's needs -- especially his "instinct of workmanship" (he doesn't have an opportunity to "do as good work as I know I can do".); #3, SUGGESTED ANSWER: Will vary and no single correct answer; students might blame the worker for having "a bad attitude" or blame the job for not being interesting or challenging. PAGE 3. #1, SUGGESTED ANSWER: Before Joe finished high school he had little or no respect for the law ("on probation"), didn't care whether he succeeded or not ("flunked out of high school" and fired from some of his jobs), and had very little use for discipline (all the above and his Marine Corps experience). Joe's outlook later in life seems to be completely reversed as seen in his behavior. He succeeds in high school and college; then rejoins the Marines and becomes a leader; goes to Law School and graduates with honors. #2, SUGGESTED ANSWER: Will vary, but should include: employers want workers who will do their jobs; education is a means of providing yourself with more job choices; higher economic rewards are available in some occupations and usually depend on the worker having more education or training. PAGE 4. #1, SUGGESTED ANSWER: Will vary, but may include: enjoyment of his work and pride in doing a good job. He thinks his job is important, and he plays a vital role in the activities of XYZ Company. His work role seems to contribute to his enjoyment of life; #2, SUGGESTED ANSWER: No correct answer. Answers will vary depending on how students define success. See "What Price Success?" (lesson #70) for more ideas on success.

Background Reading. (All of the following references are included in the "Basic Manpower Economics Library".)


Isaacson, CAREER INFORMATION IN COUNSELING & TEACHING, 1966, chapters 5,6.
Gardner, SELF-RENEWAL, 1965, chapters 1, 2, 4, 5, 7, 8, 11, 12.
Anderson, DIMENSIONS OF WORK, 1964, chapters 1, 2, 3, 4, 6, 7.
Goodman, GROWING UP ABSURD, 1960, chapters 1, 2, 3, 8, 9, 10, 11.
Venn, MAN, EDUCATION, AND WORK, 1964, pp. 1-29.

## #2 What Is Economics All About?

The purpose of this lesson is to help students develop a feeling of "at-homeness" with the subject of economics and learn some key terms. By providing a simple analytical framework -- Resources, Technology, Institutions -- we are following Jerome Bruner's lead (THE PROCESS OF EDUCATION, Harvard University Press, 1961) in stressing the structure of the discipline. We endeavor to explain the nature and scope of economics in terms that are clear and simple enough for junior and senior high students to comprehend, without "watering down" and distorting the concepts and ideas.

The definition of economics given in this lesson differs from some you have read. Our emphasis is on society, on developing resources (through education and technological advance), and on using resources. This contrasts with the more static, scarcity-oriented view of economics as a study of "the allocation of scarce resources among alternative uses".

In addition to providing definitions of "economics" and "economists", we also define the following terms:

| | |
|---|---|
| resources | capital |
| goods | land |
| services | technology |
| land | institutions |

Some authors list additional "factors of production" such as Entrepreneurship, Management, Government, Technology, etc., but we prefer listing only three: labor, capital, and land.

As a future lesson points out, "Words are the vehicles upon which ideas ride." Lesson #2 is loaded with important idea-words that will be used throughout the course.

References. For additional background, you may want to read DEEP, ECONOMIC IDEAS AND CONCEPTS, pp. 1-5, and parts of McConnell, ECONOMICS, pp. 5-40. McConnell's discussion of the nature and method of economics differ somewhat from the approach we have taken. But you will find it interesting and helpful. You'll probably want to avoid getting involved with production-possibilities analysis, as given on pp. 28-35.

Questions. At the bottom of p. 1 in the lesson, there are two rhetorical questions, answers to which are suggested in subsequent paragraphs. You should ask your class to explain in their own words what economics is "all about" and have them discuss how basic economic literacy might benefit each individual student and the entire society.

## #3 What Are the Three Basic Problems Facing Every Economic System?

The question posed in the title of this lesson is straightforward, and we hope the answer will be clear and meaningful. In the process of answering, we introduce several terms and provide definitions or explanations:

| | |
|---|---|
| economic system | private property rights |
| economy | communist economy |
| "guns and butter" | democratic socialism |
| income distribution | capital equipment |
| private-enterprise system | comparative economic systems |

We also indicate that an economic system is "performing well" if the people that make up the economic society "like" the way the three basic questions are answered. Is this an adequate criterion of good performance? If not, consider some others.

Reference. See DEEP, pp. 9-11 and 45-46. Note that DEEP lists four basic questions (p. 9). The extra one, "How goods and services are produced is omitted from our own list on grounds that institutions and technology will determine the answer to this question. Note that in the DEEP discussion, there is a great deal of overlap between (a) and (b) -- the "what" and the "how" questions.

For more intensive background reading on the subject of economic systems -- nature, functions, and types -- see McConnell, ECONOMICS, pp. 35-40 and also Chapters 5, 6, and 42.

Questions. No questions are directed to the students in the text. You might want to discuss the old "guns and butter" illustration. It does provide a vehicle for emphasizing the problem of choosing the product mix -- the composition of goods and services to produce with our available resources. Are we producing the right combination of guns and butter currently? Are the Russians producing too many guns? Too much butter?

## #4 Economic Institutions

The purpose of this lesson is to help students understand more clearly what institutions are, and how they fit into the Resources-Technology-Institutions framework in studying economics.

On page 3 of the lesson, students are asked to consider some particular economic institutions: their origin and history, the functions they serve, and whether our economy and society would be benefited by certain changes in the institutions. Concrete examples will be helpful here. TV commercials, e.g., are an extension of poster, newspaper, and radio advertising -- made possible by the advanced technology of television broadcasting. TV commercials perform the function of creating consumer demand for particular products. Should this institution be changed? Should the Federal Communications Commission establish strict regulations and controls over the type, length, and frequency of TV commercials? Would business resist an institutional change of this type? (Yes.) Why? (Because it might reduce their sales and their profits.)

The lengthy quote from J. S. Mill can serve as a take-off point for a free-wheeling discussion of how institutions influence the way income is shared in the U. S., and how the pattern of income distribution might be different -- for example, with a guaranteed income or negative income tax.

References. McConnell discusses the institutions of capitalism in ECONOMICS, pp. 43-46. John Gardner's SELF-RENEWAL treats the nature and characteristics of social institutions and the need for continuing change and adjustment. Paul Goodman analyzes the institutional structure of the U. S. in GROWING UP ABSURD. The AFL-CIO booklet, LABOR LOOKS AT AUTOMATION, considers the problem of institutional adjustment to reduce some of the burdens of technological change.

Questions. The underscored question on page 2 can be answered by pointing out that income taxes take different amounts of money from different people -- depending on the size of their income, the source of income (e.g., salaries are fully taxable, interest from municipal bonds is tax-exempt), the number of exemptions and deductions they claim. This makes the post-tax pattern of income distribution different than the pre-tax pattern. Because the federal individual income tax has graduated rates, generally families with more income not only pay more dollars in taxes but also pay a higher rate of income tax. People who receive unemployment compensation have more income than unemployed people who don't qualify for UC benefits. People with more money have more power and influence in the market. Since they have more dollars "to vote with" they exert more influence on the production of goods and services, and on the way resources are used in the economy.

The questions on page 4 are rhetorical or open-ended. If time permits, you can encourage students to try out their own personal answers and see how the class reacts.

## #5 Capitalism: "The Anatomy of Free Enterprise"

At the beginning of the period, ask the class what kind of economic system we have in the United States. (Hint: if the name of the Russian system is "communism" or "socialism", what is the name of our system?) By the end of the class period, each student should be well able to provide a meaningful response.

This lesson is pretty much informational. You might, if time permits, point out in your own words that the word competition has at least three different meanings: rivalrous behavior, a market structure with so many buyers and sellers that no single party can influence price, and a set of economic consequences (for long-run equilibrium of a firm in pure competition, see McConnell, ECONOMICS, p. 480).

You should explain that many of the terms used to describe our economic system are "loaded" words, intended as emotional slogans rather than neutral terms to identify a type of economic system. "Free enterprise" is the name many businessmen prefer. The words "free" and "enterprise" certainly have a good sound. Some people avoid the word "capitalistic" because they are intimidated by communist propaganda.

It would be appropriate to say a word or two about Adam Smith, the "founder of modern economics". As Heilbroner writes in THE WORLDLY PHILOSOPHERS, two revolutions took place in 1776 -- a bloody revolution for political independence on this side of the Atlantic; and a bloodless economic revolution (with mercantile and industrial capitalists replacing landowners as the most powerful economic group) on the other side of the Atlantic.

Also, you can use the definition of private property given in this lesson to point out that certain words used in everyday speech may be defined in a very special way by economists. It is important to note the special definition. "Private property" may be used to mean a "thing" in everyday language, but for economists it is a bundle of legal rights. The term "capital" may be used to mean "money" in everyday language, but to economists it means "man-made goods used in further production." And so forth.

Finally, you'll probably get a question from somebody -- "Do you think our country is headed for socialism?" You might ask the student what "socialism" is. Then, proceed with the discussion as you wish.

References. McConnell, ECONOMICS, contains a good discussion of the features of capitalism, pp. 43-46. There is also a brief treatment in DEEP, pp. 10-12.

Questions. The answer to each question on page 3 of the lesson is: yes, but not in their pure form, as required by pure capitalism. A further question for discussion might be: "Which of the five key institutions of capitalism is strongest in the American economy today?". The response will be open-ended and certainly not clear and simple.

## #6 The Circular Flow of Economic Activity

The circular flow model used in this lesson is basic and will be referred to frequently during the course. While it need not be mastered in full detail the very first day, you should encourage students to look at the diagram from time to time and be able to reproduce it and explain it meaningfully by the end of the first grading period. (The diagram is taken from FIRST STEPS TOWARD ECONOMIC UNDERSTANDING, the little booklet by Robert Darcy, published by the Ohio Council on Economic Education, 1966.) Lesson #14 will consider more fully what a model is and how economists use models to help explain how the economy functions.

You might want to elaborate on the explanation of resources given in the student lesson. The types of resources exchanged in the input market are, of course, the same things as the "Factors of Production". This term was not included in the lesson, but you might want to mention it. The theory of income distribution discussed in McConnell and elsewhere is often explained in terms of the income shares that go to each "factor of production". Wages to labor. Rent to land. Interest to capital. Profit to enterprise or entrepreneurship.

References. See McConnell, ECONOMICS, pp. 53-57 for a circular flow model that is similar to ours. DEEP, pp. 12-14, contains a verbal description of the circular flow process.

Discussion Questions. The question on the bottom of page 3 about business influencing consumers and the signals that consumers give out in the market brings up the issue of advertising and the notion of "consumer sovereignty". We know that the kinds of goods and services that consumers purchase in the market can be influenced by business through advertising. The power of advertising and "managed markets" has led many economists to conclude that consumers have very little sovereignty, indeed; and that it is business--especially the managers of large corporations--that make the basic decisions regarding what is to be produced in our economy.

On page 4, the very last question before "Today's Lesson in Brief" could be the basis of lively discussion of the distribution of income. If Mrs. Smith's infant daughter is starving and needs milk, but the Smith's have no money to buy milk, the market (or business) is not set up to respond to their needs. Using a market system to allocate goods and services, wants (and even desperate needs) are ignored unless the wants are backed up with purchasing power. The difference between "wants" and "demand" is that the latter involves the ability to spend money to obtain goods, whereas the former is simply desire without power to transmit signals in the market.

## #7 The Division of Labor and Economic Interdependence

A prime objective of this lesson is to point out that specialization and the division of labor have the double effect of raising productivity and also increasing interdependence. There are some additional objectives. We use Adam Smith and his famous "pin factory" example to introduce the students to "the father of economics" and his great classic, THE WEALTH OF NATIONS. Adam Smith is the most famous name in economics, and the class ought to know who Smith was, when he lived, and what some of his most important ideas are. (For a refresher on this, consult Robert Heilbroner, THE WORLDLY PHILOSOPHERS, Chapter III, or any encyclopedia.)

We also use this lesson to suggest a justification and rationale for studying economics. "Since we're all in this together -- this complex, interrelated, interdependent economic system -- let's learn how it operates. Then we will be better able to understand the consequences of our own individual actions, and the effects of other people's action on us." Finally, we use this lesson as a bridge to the next three lessons, which will highlight some of the economic and non-economic aspects of manpower and work.

You might want to bring a copy of THE WEALTH OF NATIONS to class (the library may have one) just to dramatize the importance of the book and the author. This book ranks along with the Bible, Plato, Aristotle, Shakespeare, Marx, in the great classics of the world.

One other point, We have used the terms "productivity" and "production" rather loosely in this lesson. They mean two different, though related, things. Productivity refers to the relationship between outputs and inputs. An index of labor productivity, for example, shows the quantity of goods produced divided by the quantity of labor used to produce it. The term "production" simply means total output. If you have 100 workers, and if productivity increases by 10%, and you continue to employ the entire 100 workers, then production will go up by 10%. If productivity had remained constant, you could have raised production by 10% only if you increased the number of workers from 100 to 110.

References. In addition to THE WORLDLY PHILOSOPHERS and Adam Smith's THE WEALTH OF NATIONS, you can refer to McConnell, ECONOMICS, pp. 47ff.

Questions. Top of page 3 -- typically, Mother cooks and cleans house; Dad works for wages; Brother mows the lawn and runs errands; Sister helps with the dishes; etc. Consider the chaos if every member of the family cooked his own meals, washed his own dishes, etc. The next question, in the middle of the page -- since division of labor increases productivity and efficiency within a country, it follows that everybody could be better off economically if we had more international specialization and trade. The principles of specialization and division of labor have been used for the past 200 years in arguments against tariffs and in support of free trade. On page 4 -- as a member of the same economic society, your neighbor can share the benefits of your greater productivity. The economic decisions you make as a citizen will help shape the general economic environment. The kinds of goods and services you produce as you pursue your occupation will be available for the economic society -- including your neighbor -- to consume.

## #8 The Work That People Do

This lesson is strictly exploratory and we don't intend for the students to form definite conclusions about job opportunities in the manpower market. You should encourage the students to think about their role in the manpower market and the many different types of employment opportunities which are available to them.

### Answers to Discussion Questions

1. Page 1 -- Answers will vary among students.
2. Page 1 -- Answers will vary.
3. Page 4 -- This question is included in the lesson, but not numbered: "What tentative conclusions about jobs in our economy, or the way they are advertised, can you draw from the information contained in the job ads?" SUGGESTED ANSWERS: There are many kinds of jobs available in our economy. Jobs are advertised in different ways. Job ads appeal to different needs of people and to different types of people. The requirements for jobs differ, some requiring a great deal of education and/or training and others don't. Some ads stress pay, some promotion possibilities, etc. Some jobs are for part-time employment. Jobs are available in different parts of the United States and even overseas. Some job ads are difficult to understand. Only somebody already in the particular field of work would understand them. There are jobs available for both women and men. The ads show that we have a great deal of occupational specialization in the United States economy.

### Extra Discussion Questions

1. "What similarities and differences among the jobs that are advertised, or the way they are advertised, do you notice?" SUGGESTED ANSWERS: Similarities: Race or religion not mentioned. They do stress occupational specialization. Most don't spell out how much they pay. Noneconomic aspects of jobs are emphasized in many of the job ads. Differences: Required amounts of education and training vary. Seem to indicate different types of personality and/or character needed for different jobs. Some jobs are part-time. Variation in the type of appeal made to the prospective employee.
2. "What types of information that you might need when seeking employment is not contained in the job advertisements?" SUGGESTED ANSWERS: Details on the job requirements, pay, hours, duties, fringe benefits; who you work with; working conditions; whether you would be expected to belong to the union; and opportunities for advancement.
3. "What type of entry jobs do you see in these job ads? In other words, what jobs that appear in the advertisements could you qualify for immediately -- with no additional training or experience -- after graduating from high school?" SUGGESTED ANSWERS: Sales, dishwasher, laborer, go-go dancer.

### Background Reading

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 edition, 858 pp.
Anderson, DIMENSIONS OF WORK, 1964, Chapters 3 & 4.
Goodman, GROWING UP ABSURD, 1960, pp. 17-36.

## #9 Wages, Earnings, and Family Income

In lesson #8 we got an impression of the tremendous variety of jobs in the economy. Today's lesson covers the economic or financial rewards that people get for working at these jobs. It reports information on the pay that people receive for working and how these wage earnings -- by means of the circular flow -- influence family incomes and consumer purchasing power.

Don't expect students to remember all of the data included in this lesson. However, a few numbers are well worth remembering and should be highlighted: average family income (median, about $7,000); average hourly wage rates in manufacturing ($2.80); and average weekly earnings ($112 for a worker in manufacturing, and $70 for the average employee working in retail trade).

The term "inflation" is mentioned in the lesson. You can define "inflation" as "a general rise in the level of prices for goods and services". There will be more on the subject later. If a student inquires about supply and demand, explain that these terms refer to quantities of something that are offered for sale in the market at various prices (or wage rates).

References. The data all came from the Economic Report of the President 1967 (ERP), Economic Indicators (EI), Pocket Data Book USA 1967, and Herman Miller's "Economic Topic" published by the Joint Council on Economic Education. We made some calculations from original data. See ERP, p. 226, for 1966 Compensation of Employees and pp. 236 and 242 for labor force data. We used EI for early 1967 data on wages and earnings, but you could use the table on p. 245 in the ERP for late 1966 data, as well as historical statistics. Median family income for 1965 is given on p. 233 of ERP. Ohio data came from Ohio State University's "Bulletin of Business Research", May 1967, p. 3. The $10,000 average (mean) family income is our calculation from data in ERP, and Table I is adapted from Miller's article.

Questions. Re page 4, students are likely to say, yes, these statistics on wages and family income are surprising. Whether they feel the distribution of income in the U.S. is "about right" or not is something that discussion will bring out. If somebody claims that an intelligent study of income distribution can be made without the use of statistics, the CFEE staff would like to know what method he would use.

You might want to add this little picture to the lesson, if class discussion provides a good opportunity: "If we made an income pyramid out of a child's blocks, with each layer representing $1,000 of income, the peak would be higher than the Eiffel Tower, but almost all of us would be within a yard of the ground." Quoted by Miller in his "Economic Topic", and credited to economist Paul Samuelson. Miller also reports that there are 90,000 millionaires in the U. S., and between 1955 and 1965, the number of millionaires tripled while overall population increased only 20%.

As a further discussion question, you might ask the class to explain why real wages doubled between 1940 and 1966, as stated on page 2 of the lesson. The main reason, of course, is that productivity increased sharply during the period.

## #10 The Joy of Work

This lesson provides a change of pace -- very informal, unstructured, non-statistical, non-rigorous. It's purpose is to suggest early in the course that there are non-economic aspects to work and its rewards. Try to stimulate as much discussion as possible, and encourage both serious and humorous response. This can be a morale-builder as well as a subtle, low-pressure introduction to the non-financial side of work's rewards.

Use the comments in the student lesson, following the cartoon titles, as hints for questions to ask the students. Ignore them or discuss them, as you prefer. The reference to "instinct of workmanship" in #6 anticipates lessons #29 and #38 on the psychology of work that come later in the course. The term is from Thorstein Veblen's book (first published in 1914) and refers to an assumed "human propensity for activity tailored to the efficient achievement of a goal." See pp. 9f of "Psychological Dimensions of Work," CFEE Technical Paper #2, 1967.

Some additional questions you might consider asking your students are: What noneconomic satisfactions can you derive from a job? (See lesson #29 for answers.) Which of these types of noneconomic rewards of work are most important to you? Why? What types of work do you think will give you the most noneconomic satisfaction? Why?

Encourage students to bring cartoons, photos, and other materials to class throughout the course to illustrate various aspects of work, economic and otherwise. You might post them on a bulletin board.

## Lessons #11 - 20 -- Overview and Continuity

This unit continues exploring the World of Economics. It is the second half of the introduction to economics. Lessons #11-15 provide additional analytical tools for viewing the operation of our economy. Lessons #16-20 examine four basic sectors of our economy -- labor unions, business firms, government, and consumers, and are related to lesson #4's discussion of economic institutions.

GROSS NATIONAL PRODUCT AND SOME FUNDAMENTALS OF ECONOMIC STATISTICS, lesson #11, introduces students to the function and value of economic statistics and provides them with some specific examples of statistical indicators. Since many of the lessons that follow present statistical data (especially in the form of tables and charts), it is necessary to demonstrate to the students the importance of data. This lesson ought to be valuable in helping identify the reasons why statistical data are so important for understanding economics.

Lesson #12 (SCARCITY, OPPORTUNITY COSTS, AND CHOICES) explains two important economic concepts and shows how they are related to decision-making and choice.

"THERE IS NO SUCH THING AS A FREE LUNCH", lesson #13, presents the basic economic principle that it takes inputs to produce outputs. Using some of the ideas of lessons #11 and 12, the point is made that resources are used in producing the goods and services that we consume whether we personally pay for the final product or not. After studying this lesson, the students should see that we (as an economic community) never really get "something for nothing".

Lesson #14 (MODELS, THEORIES, AND THE REAL WORLD) illustrates the importance of an analytical framework, simplification, and abstraction in studying economic behavior. The primary purpose of the lesson is to give the students a sense of how models and theories may be helpful to them in understanding the economic world.

WHAT ARE THE STEPS IN ECONOMIC REASONING, lesson #15, introduces a method of rational planning and decision-making. This is a key lesson which provides the students with a procedure that will be extremely valuable to them in thinking about economic and other types of problems. This analytical tool is used explicitly in some of the other lessons, e.g., lesson #52.

Lesson #16 (ECONOMIC GOALS OF THE AMERICAN PEOPLE) ties in with lesson #15 in that identifying goals is the second step in rational planning and decision-making. This lesson can help students see that goals are important for evaluating the performance of the economy. It also gives them a chance to examine some general goals of our economy and consider whether they think these goals are appropriate and/or desirable.

Most of the goals mentioned in lesson #16 are discussed in more detail in lessons that follow. For example, full production and economic growth are considered in lessons #66 and 73; freedom of choice and equality of opportunity in lesson #27 and 49; economic justice in lesson #32, 67, and 68; and economic security in lessons #18 and 59. This lesson on goals is also directly related to the concerns of several of the lessons at the end of the course. (For example, lessons #67-70, 73, 74, 75.)

"THE BUSINESS OF AMERICA IS BUSINESS", lesson #17, introduces an important economic institution -- business enterprise. This lesson is designed to show students the significance and variety of business firms in the functioning of our economy.

Lesson #18 (GOVERNMENT'S ROLE IN OUR ECONOMIC LIFE) gives an insight into the important roles performed in our economy by local, state, and federal government. Students ought to find this lesson interesting in that it suggests that government involvement in the economy is neither good nor bad except when its performance is compared to the needs and aspirations of the people it serves. Instead of debating the role that the government <u>should</u> play in the economy, lesson #18 describes the role that government <u>is</u> playing in the economy. This role is further described in lessons such as #19, 30, 34, 53, 59, 71, and 73.

THE ROLE OF LABOR UNIONS, lesson #19, provides some valuable information on labor unions in our economy. This lesson and lesson #32 (COLLECTIVE BARGAINING) gives the students a what, why, when, who, and how analysis of the role of labor unions.

Lesson #20 (CONSUMERS OF ABUNDANCE) presents background material on the role of consumers in our economy. Since the students are all consumers, the importance of this sector for the functioning of the economy is stressed in this lesson.

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## #11 Gross National Product and Some Fundamentals of Economic Statistics

This lesson has two objectives: to explain the value and function of economic statistics; and to introduce three statistical indicators -- Gross National Product, the Consumer Price Index, and the Unemployment Rate. These measures will be used throughout the course, and it is important that students learn what they are and how to use them. However, it isn't necessary that they master them the very first day, on the basis of this one lesson alone. They should identify them in this lesson, and gradually develop a working knowledge of how to use them as the course progresses.

In the interests of brevity, we did not provide detailed examples of what it is that consumers bought with their $465 billion of spending in 1966 -- cars, toothpaste, theater tickets, hamburgers, etc. Or what business bought with its $117 billion of spending -- new plant and equipment, addition to inventories. Or the salaries that school districts paid to teachers, highway costs for state governments, defense expenditures by the federal government under Government Purchases of Goods and Services. You may want to mention specific examples, or ask students to think of some.

You may want to explain and demonstrate how to adjust (deflate) current GNP data for changes in the price level. See McConnell, pp. 163ff. A simple formula is:

$$\frac{\text{Price Index in Base Year}}{\text{Price Index in Current Year}} \times \text{GNP in Current Year} = \text{Adjusted GNP}$$

If the base year is 100, all you need to do is divide GNP in a particular year by the price index in that same year, and the result will be that year's GNP, expressed in base-year constant dollars.

References. McConnell, ECONOMICS, treats national income accounting on pp. 161-181. Chapter 11 on "The Business Cycle" includes material on unemployment and inflation. Use the index for other references.

Questions. Answers to the three questions on pp. 3-4 of the lesson:

GNP -- it will be higher than last year. GNP in 1967 is expected to increase to about $780 billion in current dollars. Check the monthly SURVEY OF CURRENT BUSINESS (published by U. S. Department of Commerce); ECONOMIC INDICATORS, or the FEDERAL RESERVE BULLETIN, or other periodicals. There are nine zeros in a billion: 1,000,000,000. That's a thousand millions.

CPI -- if the index dropped by 50%, the value of the dollar would double.

UR -- if unemployment rose to 20%, there would be a national economic crisis. Taxes would almost certainly be cut and government spending increased--to encourage more consumer spending, business investment, and government purchases of goods and services.

## #12 Scarcity, Opportunity Costs, and Choice

Some writers and teachers of economics give great emphasis to the notion of scarcity and the distinction between "free goods" and "economic goods". This particular course is not scarcity-oriented. Rather than being concerned primarily with the "scarcity" of resources, we choose to emphasize the development and use of resources, especially the development of human resources. But there is a sense in which goods and services are scarce, and resources are scarce, and this is explained in the lesson. However, you should avoid overemphasis on scarcity; because it moulds a world-view that is static, rigid, narrow, and simplistic. Don't make scarcity a major theme of the course.

Using "scarcity" as a starting point, we can move to the very important idea of opportunity cost. This is one of the most important concepts in the entire course. Not only should every student understand the concept, but you should spend some time discussing concrete examples and specific applications in the real world. An awareness of opportunity costs can help the individual make intelligent choices -- because it clarifies the alternatives -- and the concept has significant implications for the entire society. Should our city have new street lights, or a new park, or a library, or more and better-trained policemen? Should the federal government spend $25 billion on a war in Asia, or use the money -- and the resources these dollars command -- to fight a bigger war on poverty, or to conserve our natural resources, or to improve our schools and highways?

References. Scarcity, opportunity costs, and the need for decision-making are discussed in DEEP, pp. 8f. McConnell treats this subject on pp. 23-26 of ECONOMICS, and also provides a more sophisticated analysis of opportunity costs by means of a production-possibilities model on pp. 28-34. In chapter 41, McConnell discusses poverty in the underdeveloped countries, and what scarcity means to them.

Discussion Questions. The answer to question #1 on page 3 is that we don't have enough resources to produce all the goods and services that people would like to have. For an individual, in our market-type economy, it's a problem of limited purchasing power. For the group as a whole, it is a matter of not enough physical resources -- labor, land, capital. The answer to #2 is open-ended. If we weren't spending $2 billion a year on Poverty programs, we could spend the money on highways, cleaning up rivers and streams, building parks in cities, accelerating our space-research efforts, etc. Ask the class what they would rather have the government do with the $2 billion that it is spending annually in support of Office of Economic Opportunity programs. The answer to #3 is given on the first page of the lesson, below the verse: disagree, Why? Money is useful for allocating or rationing goods and services. Resources are needed to produce them.

## #13 "There is No Such Thing as a Free Lunch"

This lesson pulls together and reinforces the content of lesson #11 on GNP statistics and #12 on scarcity and costs. It is one of the most significant lessons in the course and hopefully will be well-remembered by students. The recognition that it takes inputs to get output has many practical and immediate applications.

The talk referred to in the lesson was given by Dr. Leonard S. Silk, economics editor of Business Week magazine. (See AMERICAN ECONOMIC REVIEW, May 1964, pp. 595-609, "Efficiency in the Teaching of Economics: The Product -- the Problem of Communication".) Most of the data relating to our use of natural resources came from H. Lansberg, NATURAL RESOURCES FOR U. S. GROWTH, 1964.

The illustrations of opportunity cost -- "no free lunch" -- in the closing paragraphs on page 4 of the lesson, are fairly sophisticated. You might want to discuss the alternative things that could be done with the money and the resources that presently go into particular uses. There <u>are</u> alternative possible uses for resources controlled by government, by business, by individuals. When the resources are used to produce a particular good, somebody must do without the goods that might alternatively have been produced.

<u>References</u>. No specific treatment of this topic is given in DEEP, but you may want to review some related ideas and terms on pp. 3-10. McConnell's ECONOMICS has some general background in chapters 2, 3.

<u>Discussion Questions</u>. On the bottom of page 1, Dr. Silk meant that economic understanding (the output) requires study, thinking, reasoning, remembering (inputs by students). On page 4 of the lesson, the answer to the question about running out of materials is uncertain. Clearly we ought to pay attention to conservation. In the next paragraph, (Why do production functions change?), the answer is that when technology is improved, we find new ways to combine resources (inputs) to produce outputs. So, production functions are altered. In the following paragraph, students are asked whether the education they are getting is "a free lunch"? The answer is <u>no</u>, since inputs of manpower (the teacher's and other), capital (the school building and equipment), and natural resources (the land the school is located on, plus materials, etc.) are all required to provide the output of educational services. You could point out that all these resources have an <u>opportunity cost</u>. Also point out that the inputs include the student's own time and effort, which also have an opportunity cost.

## #14 Models, Theories, and the Real World

The importance of History, Statistics, and Theory is stressed throughout the course. These are the techniques of analysis that must be learned in order for a person to think, read, and talk intelligently about economic matters. They are techniques that must be in the tool-kit of every economically literate person. Like any other skill, however, we begin a step at a time. The purpose of this lesson is not to make economic theorists out of junior and senior high school students, but to help them take a first step toward understanding what economic analysis is and to see how models and theories can be used to explain how the economy operates.

There are five main points in the lesson:

1-- Analytical Frameworks, what they are, how they're used, and a specific example (the Resources-Technology-Institutions framework) from this course.

2-- Models, ditto. Example: the Circular Flow Diagram.

3-- Theories, ditto. Example: the Supply and Demand theory of Price.

4-- The test of a good theory is simply this: does it work, in the sense of explaining and predicting behavior? If not, it's a bad theory. This should be a good opportunity to develop respect for theory -- when it's good theory -- and set students on their guard against bad theory.

5-- The quote at the end of the lesson is the first reference to John Maynard Keynes (pronounced Cains). Along with Adam Smith, and a few others, Keynes is mentioned to acquaint students with some of the great economists and the ideas they contributed.

A further educational objective is to reinforce student understanding of the circular flow model and the use of economic statistics. The numerical example on page 1 of the lesson illustrates the kind of reasoning-with-the-aid-of-statistics that should become a habit with students.

References. McConnell discusses methodology on pp. 6-12 of ECONOMICS. Avoid introducing graphical techniques to your students as the educational benefits almost certainly would not equal the costs.

Discussion Questions. The only question in this lesson that isn't rhetorical is the one on page 3, just before the summary. It is open-ended and should be answered by students who are able to tell why they feel the way they do. Ask for specific examples of some economic ideas that have very great significance (such as private property, the wages system, applying scientific knowledge to production, money and banking, Marxism, etc.). You might also want to suggest some very influential ideas outside the field of economics, such as Christ's idea of love, the Greeks on democracy, Darwin on evolution, Freud on human emotion, etc. Ask your students to name some other great ideas that "rule the world".

## #15 What Are the Steps in Economic Reasoning?

You will recognize the five steps in economic reasoning as being variations of "the problems approach" and "scientific method". If there is one lesson in the entire course that has tremendous value and virtually unlimited application, not only in the fields of economics and manpower, but in virtually every area of life where decisions are made, this is the lesson. Try to impress the students with the importance and usefulness of this approach to solving problems, and reinforce it with examples and repeated references to "the five steps in economic reasoning" throughout the whole course.

Note that in order to use the five steps in economic reasoning with maximum effectiveness, one must be skilled in the use of economic theory, statistics, and history. All of the methodology that we have stressed up to now can be tied together in this lesson -- the importances of statistics and history in defining the problem, the role of an analytical framework and models to clarify issues, the usefulness of theory in predicting likely outcomes of alternative measures, the value of knowing opportunity costs to help make choices and decisions.

References. The particular phrasing of the five steps used in this lesson comes from FIRST STEPS TOWARD ECONOMIC UNDERSTANDING (R. Darcy, 1966), based on Robinson, et al. cited in the lesson.

Discussion Questions. Let the class experiment with the five steps, through open discussion. For the poverty example, the following might be helpful:

1-- Poverty can be defined as not enough money to buy the goods and services necessary to meet standards of health and decency. Or, family income under $3,000 per year. Or many other possible definitions.
2-- We could set as our goal the elimination of poverty from the United States by 1975.
3-- To reach the goal, we might guarantee everyone a job with a salary of at least $65 per week. Or a "welfare" check. Or other programs.
4-- If we used a "guaranteed income" approach, would people decide not to work, since they would receive a basic income anyway? Would our national production go down? How much would it cost to eliminate poverty? (About $11 billion a year to raise all families above $3,000.)
5-- Let the students come up with their own recommendations, and then explain why they prefer that particular solution.

Here are some hints for using the five steps in career planning:

1-- Everyone will have to make decisions about what school curriculum to follow, and eventually what occupation to enter. That poses certain problems.
2-- Do you want to enter a particular field of work? Make a lot of money? Travel? Have leisure time? What are your interests and goals?
3-- Suppose you want to be a civil engineer. Will you have to go to college? What kind of work experience should you get?
4-- If you decide to go to college, will you have to earn high grades in

school? How will you finance your college education?

5-- Choose the goals and course of action that appear best for you, in view of your own personal preferences and your understanding of what is required and what's involved.

Statistics, history, and theory may be used in solving economic problems in the following ways:

1-- Statistical data can be a means of identifying the problem in a numerical way. It also may serve as a way of measuring the probable outcomes of different methods of reaching the goals.

2-- History can be extremely helpful in defining the problem by putting it in a "historical perspective". Our goals and methods are partly a result of the historical evolution of ideas as well as technology and institutions (e.g., our goal of putting a man on the moon reflects our pioneering tradition as well as recent advances in science and technology). We can view the true nature of our problems clearer by using the light of history.

3-- Theory provides us with some analytical tools which we may use in all five steps of economic reasoning. For example, in defining our problem, we may use national income accounting concepts; and in considering alternative methods for reaching our goals, we can examine opportunity costs.

## #16 Economic Goals of the American People

This lesson lists seven economic goals, explains their meaning in operational terms, and illustrates how we use economic statistics to measure the performance of the economy in order to determine how well it is achieving its goals.

Three publications are cited in the lesson to illustrate the concern that the American people have shown for clarifying their goals. An interesting class project could be based on these publications -- perhaps a series of oral reports. In any case, we want to emphasize that people do more than just talk about goals: sometimes they study goals very carefully and even calculate what it would cost to achieve the goals.

Note on pages 2 and 3 of the lesson that we make frequent use of economic statistics in discussing goals. Students should be encouraged to use facts -- economic statistics -- when they discuss economic issues.

The seven goals listed in the lesson are well worth remembering. Near the end of the period, you might ask the class to take out a piece of paper and see if they can list the seven goals. Reinforce learning by referring to the goals from time to time in the context of other lessons. The Employment Act of 1946 should also be emphasized. Be sure students know that this law requires the federal government to take appropriate action as needed "to promote maximum employment, production, and purchasing power".

References. In addition to the sources cited in the lesson, the subject of economic goals is treated in DEEP on pp. 22ff, 27, 41, 43. McConnell lists some goals in ECONOMICS on pp. 13f. The ECONOMIC REPORT OF THE PRESIDENT discusses problems and goals on pp. 4-26, and in the Council's report, especially pp. 99-197.

Discussion Questions. Responses to the question on page 4 of the lesson should stimulate a lively discussion. Certainly there will be differences of opinion. Perhaps you will have an opportunity to point out that individuals disagree about certain goals and attach different priorities to various goals. Why? Because of differences in understanding and differences in values. You can explain that "values" are concepts of what is good and what is bad. They are the basis for making "value judgments". This important subject will be covered in detail in a later lesson.

What goals were left out? Students might suggest some of those: preserving the free enterprise system, maintaining a strong military position in the world, increasing the amount of leisure time for workers, reducing the size of the national debt, etc. etc. Ask them why they value the goals they suggest, and what priorities and rankings they would assign to the overall list.

## #17 "The Business of America is Business"

This lesson provides an introduction to business in general and the large corporation in particular. It explains the functions and motivation of business enterprise, and how business fits into the circular flow of economic activity. There is no attempt to cover every important aspect of business enterprise, and we have deliberately avoided going into details about the advantages and disadvantages of different forms of business organization.

The main objective is for students to learn that a business firm is an organization that employs resources to produce goods and/or services; it is motivated by a desire to make profits; it occupies a pivotal role in the circular flow of economic activity -- buying in the input market and selling in the output market. Of great importance is the corporation -- a particular form of business organization -- and the fact that some corporations dominate their industries, replacing traditional market competition and becoming a new institutional structure for allocating resources, producing goods and services, and distributing income.

References. McConnell discusses business in chapter 8 of ECONOMICS. The FORTUNE DIRECTORY, published every August in FORTUNE magazine gives a detailed analysis of the largest corporations. The POCKET DATA BOOK USA 1967 contains relevant statistics on page 239.

Figures included in the introductory statement of the lesson were developed as follows. The private (business investment + consumer spending) sector of our economy absorbs 80% of total GNP, with Government Purchases of Goods and Services absorbing the remaining 20%. According to figures in the POCKET DATA BOOK (p. 239), corporations had 78% of total business receipts in 1963. Multiply 78% times 80% and this gives about two-thirds of total value of production accounted for by business corporations.

Discussion Questions. There are no questions explicitly asked in the text of the lesson. If time permits, ask students to explain why some corporations have grown to such enormous size. Ask them also to recall the five basic institutions of pure capitalism (lesson #5) and see how well they apply to a corporation like General Motors. Is there private property? (Who really owns the corporation's assets. If the answer is "the stockholders", discuss the actual power of an individual stockholder to control and dispose of the machinery and buildings and products of GM.) Do the managers of GM attempt to maximize profits? (Who actually gets the profits earned by GM?) Is there competitition in the automobile industry? (Are there so many sellers of cars that no individual company has the power to influence the price of cars?) Is there "free enterprise" in the automobile industry? (Are individuals and groups of individuals free to come into existence as a producing unit in the automobile industry? What are some of the problems involved in setting up a new corporation in the auto industry?) Are prices set by supply and demand forces in the market? (Who determines the price tags that are put on new cars? Who determines the wages that will be paid to auto workers?)

## #18 Government's Role in Our Economic Life

This lesson contains many ideas and a lot of statistics. Some of the material will have to be treated only briefly. You may want to spend most of the class time discussing questions raised by students after they have read all or parts of the lesson. You may also decide to come back to this lesson for further treatment.

Government can be a touchy subject, especially government's role in the economy. We try to avoid putting government -- whether federal, state, local, or all together -- in the role of villian or hero. Like any social institution, government has certain important functions and has virtues and shortcomings. But government is not "some mysterious thing out there, above and beyond us". Government, after all, is an agency of the people that make up our society. Suggest to your students that they think of government as "us", not "they".

Note once again the use of statistics, repeated emphasis on the three basic problems faced by every economic system, and the provisions of the Employment Act of 1946.

References. Data used in the lesson were taken from the POCKET DATA BOOK USA 1967 (p. 99) and from the STATISTICAL ABSTRACT OF THE UNITED STATES 1966 (p. 416). Also from the 1967 ECONOMIC REPORT OF THE PRESIDENT (p. 213) and the Census Bureau publication, GOVERNMENTAL FINANCES IN 1965-66 (p. 23). There is a short discussion of government's role in the economy in DEEP, pp. 21f. McConnell provides an excellent treatment in ECONOMICS, pp. 98-113, 141-155, 667-693, and 252-265.

Discussion Questions. Here are some suggested questions and answers:

1-- Why are there so many units of government in the United States? Answer: We have a large country, geographically and in terms of population. There are many different functions to perform. Small, localized governmental units perform some functions well, such as fire protection and cleaning streets. For other functions, such as national defense, only the federal government has the broad powers and economic resources to do the job.

2-- Which level of government is best-suited to operate the schools and to provide money to support the schools? (Discuss pros and cons of state financial aid to local schools and also federal aid.)

3-- Ask the class to explain the sense in which sales taxes are "regressive". Answer: families with lower incomes spend more of their income than high-income families. The latter save a lot of their income. You pay sales taxes only on the part of income that is spent. Therefore, and also for additional reasons, poorer families pay a higher percentage of their incomes to government in the form of sales taxes. You might compare this with income taxes, which typically are "progressive".

## #19 The Role of Labor Unions

Many students apparently have no clear idea of what a labor union is, what unions do, why they came into existence, and what role they play in the economy today. This lesson answers the questions "What", "Why", "When", and "Who" but leaves the question of "How" (and more detail on "Who") for a future lesson on collective bargaining.

"What" -- a union is an association of employees.
"Why" -- to increase their influence in dealing with employers on such issues as wages, hours, working conditions, job control.
"When" -- the printers and shoemakers formed unions in New York and Philadelphia in the late 1700's; the American Federation of Labor was formed in 1886 (at a convention in Columbus, Ohio); and unionism was given a major boost with passage of the Wagner Act in 1935.
"Who" -- 18 million wage-earners, especially blue-collar workers in transportation, construction, steel, electrical equipment, etc.

References. There is a brief discussion of labor, wages, and union on pp. 38-40 of DEEP. McConnell provides background on the labor movement in ECONOMICS, pp. 646-655 and deals with collective bargaining and the overall economic implications of unions on pp. 655-665. Quotes describing what it was like to be a worker around 1900 came from OUR NATION FROM ITS CREATION, 2nd ed., by Nathaniel Platt and M. Drummond, Prentice-Hall, 1966, and from SIGNATURE OF 450,000, a 64-page publication of the International Ladies' Garment Workers Union, May 1965 (1710 Broadway, New York 10019). Working rules and the statement by President Baer of the Philadelphia and Reading Railroad came from LABOR PROBLEMS: CASES AND READINGS, 2nd ed., edited by George P. Shultz and John R. Coleman, McGraw-Hill, 1959, pp. 114f. Quotes from Presidents Roosevelt and Eisenhower came from WHY UNIONS?, a 16-page publication of the AFL-CIO. Unemployment data for the 1930's is found in the 1967 ECONOMIC REPORT OF THE PRESIDENT, p. 236.

Questions. Ask for student comment on the question on page 2 of the lesson. The rules on courting, smoking cigars, and dancing ought to be good for a laugh. Today, few employers dictate the church contributions of their employees, but what about the United Appeal and similar "voluntary" contributions? The questions on page 5 of the lesson might stimulate a lively discussion. On the other hand, it may be that the students are completely unaware of union membership on the part of their parents. Ask, and see where the discussion leads. On the subject of unionism, and other controversial topics that you have students talk about in class, you might want to read this quote from John Milton (17th century English poet and essayist): "When there is much desire to learn, there of necessity will be much argument, much writing, many opinions; for opinion in good men is but knowledge in the making."

## #20 Consumers of Abundance

Ours is a mass-consumption society. In our culture, the consumption of goods and services is at the very center of our lives. "Getting and spending" occupies not only our time and energy, but also our thoughts and dreams. Social status, success, progress, and many other notions are closely tied to our activities as consumers. We could spend many lessons on the psychology of consumer behavior, the role of advertising, principles of personal finance, and details on product innovation and marketing. But we won't do so in this course. We are interested in consumers as spenders and want to emphasize the role of consumers in the circular flow to show how employment and earnings are related to consumer spending.

At the bottom of page 1, we indicate our disagreement with the notion that consumption is or should be the "end purpose of all economic activity". We'll suggest later that the economy should function in such a way as to serve the needs of people not only in their capacity as consumers, but also as workers, citizens, etc. It is our belief that the economy has been too strongly biased in favor of the output and consumption of goods and services in the past. More consideration should be given to the input side of our GNP -- the conditions under which people live and work in order to produce goods.

If there is confusion concerning the circular flow diagram on page 2, have the students refer back to the full-blown diagram in lesson #6.

References. There is a brief note on consumers on page 4 of DEEP. McConnell discusses consumer households in ECONOMICS, pp. 115-124. Data on ownership of household appliances, etc., are found in STATISTICAL ABSTRACT OF THE UNITED STATES 1966, p. 754, and POCKET DATA BOOK USA 1967, p. 273. Details on consumer spending are from ECONOMIC REPORT OF THE PRESIDENT 1967, p. 224. Personal Income data are also from ERP, p. 230.

Discussion Questions. (Listed on p. 4 of the lesson.)

1. After students give an answer, have them explain why they answered the way they did.
2. For example, liquor, bombs, cigarettes, daytime TV soap-operas, school buildings, streets, low-cost private housing, etc. Be sure to have students give reasons for their answers. Encourage discussion and debate among students having differing ideas.
3. If resources are "mis-allocated" or used for the production of the "wrong" goods and services, there will be fewer goods and services available to fill your needs and satisfy your wants -- both individually and as a member of the community. The opportunity cost of producing a load of bombs may be the new school or hospital or apartment building that your neighborhood, or somebody else's neighborhood depserately needs.
4. The amount of disposable Personal Income and the way income is distributed are major determinants. Advertising is another. Students will think of more.

## Lessons #21 - 24 -- Overview and Continuity

Three lessons (#21, 22, 23) in this unit are concerned with technology and its effect on our economy, education, and way of life. The fourth lesson (#24) is a review of some of the major ideas in the preceding 23 lessons. In this unit students get a chance to learn a few things about the nature of technology, and they can begin to explore how this force influences their lives. As they read these three lessons, they should begin to develop a sense of both the benefits and problems that are inherent in technology.

THE KNOWLEDGE EXPLOSION: TECHNOLOGY, AUTOMATION, AND CYBERNATION, lesson #21, shows the links that exist between knowledge and technological change. This lesson has a brief discussion of automation and cybernation, two modern technological forces that are bringing about profound changes in our economy and society.

Lesson #22 (BENEFITS AND BURDENS OF TECHNOLOGICAL CHANGE) provides a brief examination of some of the advantages and disadvantages of technological change.

ARE TODAY'S SKILLS GOOD ENOUGH FOR TOMORROW'S JOBS?, lesson #23, demonstrates the effect that technological change can have on our lives. This lesson should help the students see that continuing education and training will have to be included in their plans if they are going to successfully participate in the manpower market of the future.

This case study in skill obsolescence can help motivate students to want to learn the content of this course. Susie's case illustrates the need for up-to-date information, skills, and attitudes that are appropriate for a dynamic economy and its changing manpower market. The lesson is related to the topics and concerns of several other lessons dealing with occupations and employment trends (e.g., #41, 43, 45, 50), manpower market (e.g., #27, 31, 53, 67), and skills (e.g., #44, 54, 55, 65).

Lesson #24 (THE ECONOMIC WORLD AND WORK: A REVIEW LESSON) provides a chance for students to review and apply the basic information they have learned in the first 23 lessons of the course. This lesson is the first of two review lessons -- the other being lesson #52 -- that have been designed to highlight some of the important ideas in the course by requesting students to use the concepts and data they have learned in answering questions.

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## #21 The Knowledge Explosion: Technology, Automation, and Cybernation

You might begin the day by asking someone to define automation and cybernation before reading the lesson. Ask what connection there is between "knowledge" and "cybernation". At the end of the lesson, refer back to the title and note the progression from knowledge to technology (application of knowledge to technical and economic problems) to automation (more complex technology) to cybernation (machines linked to high-speed electronic computers). On the middle of p. 2, emphasize the two characteristics of technology that are listed: technology is cumulative and the rate of change is accelerating.

References. Data for R&D up to 1964 are given in POCKET DATA BOOK USA 1967, p. 164. Examples of automation starting below the picture on page 3 of the lesson are from several sources, including Fact Sheet #7, GREAT DECISIONS 1959, published by the Foreign Policy Association. McConnell has brief notes on technology, automation, R&D, and related topics: see his Index. For this and the next lesson, review LABOR LOOKS AT AUTOMATION #p-2 in "A Basic Manpower Economics Library".

Discussion Questions.

1. Combining the horse-drawn carriage and the steam engine produced the railroad engine, or "horseless carriage". The internal-combustion engine was mounted onto a wheeled vehicle to pull a plow, cultivate, and perform a variety of other tasks previously done with separate farm implements. An ordinary lawn mower combines wheels, knife-blades, and in the case of power mowers, an electric or internal-combustion engine. Students will think of many examples.

2. Automation increases productivity and output, so we can have new, more, and better goods; men don't have to perform difficult and boring work; etc. On the minus side, machines make work lonesome and boring; some workers lose their jobs and earnings; when machines fail to work properly there is chaos (as in the East-coast electric power failure) -- and recall the electronic communications breakdowns that led to nuclear war in "Dr. Strangelove".

3. Knowledge can increase your ability to do more things and therefore give you a wider range of choice in deciding what to do. Knowledge may also help you make a wiser choice of what to do -- in terms of your education, occupation, choice of a spouse, etc.

4. You can speculate together on this one. Remember an old classic cartoon caption: "I'm so smart I make myself sick" -- as confessed by the busy executive suffering from ulcers, high blood pressure, and nervous tension. Some of the scientists who made the atomic bomb -- an achievement that required vast scientific and technical knowledge -- were sickened by the destruction that it produced.

## #22 Benefits and Burdens of Technological Change

While the Basic Manpower Economics Library list does not include TECHNOLOGY AND THE AMERICAN ECONOMY, (Report of the National Commission on Technology, Automation, and conomic Progress) it does include Bowen and Mangum, AUTOMATION AND ECONOMIC PROGRESS, which contains a condensation of the Report, along with selections from the supplementary studies. In general, neither the Commission nor Bowen & Mangum (Commission Chairman and Executive Secretary, respectively) endorse the view that we are experiencing an "automation revolution" that will completely remake the American economy.

The closing quotes in the paragraph at the top of page 2 are from Ben B. Seligman, MOST NOTORIOUS VICTORY (New York: The Free Press, 1966). Prof. Seligman, a labor economist from the University of Massachusetts, expresses much greater concern over the dangers of automation.

The treatment of technology's economic benefits on page 2 may pose some problems. There are conceptual and statistical difficulties inherent in the analysis of productivity and growth. Don't try to resolve these to the full understanding and satisfaction of your students, because it can't be done.

References. GNP data used on page 2 are from the ECONOMIC REPORT OF THE PRESIDENT 1967, pp. 213f. Data on farm population and number of people fed and clothed per farmer also are from 1967 ERP, p. 131 and 297; and figures showing productivity growth in agriculture and for the total private economy came from page 33 of the 1967 MANPOWER REPORT OF THE PRESIDENT. The Coal-mining illustration is from the AFL-CIO publication, LABOR LOOKS AT AUTOMATION (#p-2 in Basic Library). The quotes on "myths of automation" are from Senate Hearings, statement by the late John I. Snyder, Jr., Chairman and President, U. S. Industries, Inc.; see Mangum, THE MANPOWER REVOLUTION (#4 in Basic Library) pp. 55-57. Unemployment data given on page 4 of the lesson are from 1967 ERP, p. 236.

Discussion Questions.

1. Students might say they would go out and get another job. Or they might try to prevent the new machines from being installed. Ask them to tell what they would do, and why.
2. Students may feel that these are not really myths, but are the truth. Myths can influence the economy by leading people to make certain decisions and choices that result in a particular pattern of resource use, production, income distribution. Use some concrete examples.
3. As explained in the lesson, it is necessary to adjust GNP data given in current dollars (as are the $208 billion and $740 billion) to correct for inflation. After "deflating" the GNP figures, you find that real GNP rose only 110% (see p. 214 of 1967 ERP for GNP in constant 1958 dollars).

## #23 Are Today's Skills Good Enough for Tomorrow's Jobs?

Because of the length of this lesson, you might assign it the day before and let the students read it outside of class. Or, you could present Susie's story as a class play.

Answers to Discussion Questions (on page one of the lesson)

1. Answers would vary among students.

2. Answers could vary a great deal among students in class. Some that might come up are: Susie should have planned better, continued her education, not married so young and left the labor force, kept in better touch with the changing employment requirements, gotten a "broader" education which would not become obsolete so fast, or not ever tried to go back to work.

3. Plan. Get a good education and training in broad, as well as specific skills. Continue your education and training, and be aware of changes in employment opportunities.

4. Blame is difficult to assess. Susie is responsible for her own job career and cannot, nor should not, try to place the responsibility elsewhere.

Extra Discussion Questions

1. "At Cape Kennedy, knowledge is accreting so fast that a portion of every day must be spent learning the total of what one's colleagues discovered yesterday. This process is so important that it's estimated that after a lapse from this learning process for as long as eight weeks, the individual would be obsolete, and of no further use to the space effort." (Dr. Carlton M. Singleton, Deputy Director, Appalachia Educational Laboratory, NEWSFOCUS: AEL, Vol. I, No. 7, June 1, 1967. COMMENT.)
   Suggested answers: Will vary among the students.

2. "What general skills do you think will be useful for tomorrow's jobs?"
   Suggested answers: Communication, computation, manual dexterity, and group organization (dealing with people). These skills have a high "transfer" value in that they are valuable in most jobs now and in the future. Lesson #54 discusses these skills.

Background readings

Mangum (ed.), THE MANPOWER REVOLUTION, 1966, pp. 395-416.

Gardner, SELF-RENEWAL, 1965.

## #24 The Economic World and Work: A Review Lesson

1. Write "Resources" and "Technology" and "Institutions" in the intersecting circles. Economics is the study of how society organizes to develop and use its productive resources to satisfy human wants. Elaborate on this in discussion if you wish, drawing on material from the lessons cited.

2. Every economic society must determine the overall level of economic activity (How Much to Produce), the composition of output (What to Produce), and the distribution or sharing of our income (For Whom to Produce). Discuss the meaning of these terms.

3. List the five characteristics from lesson #5, page 2. Insert in the boxes, "Resource Owners" (upper left), "Consumer Households" (upper right), and "Business Firms" (lower box). Then link with solid lines to show real flows of goods and services and broken lines (moving in opposite direction) to show money flows. For full details on the Circular Flow, see p. 1 of lesson #6.

4. Examples might be: Carpenter, $150 per week; Sales Clerk in department store, $75 per week; Machine Operator in a factory, $115 per week; High School Teacher, $175 per week. Occupations are described in lesson #8. Estimates of earnings can be based on data given in lesson #9 from general information (theirs and yours).

5. See lessons cited.

6. After the goals are listed, ask the class; what does Full Production mean? How do we know when we have Full Production? (Answer: it means having full employment and efficiency in the use of resources; full employment is reached when the Unemployment Rate is around 3% or 4%.) What does Stable Growth mean? (Answer: annual increase in GNP around 4% to 5%, without having the Consumer Price Index rise by more than 1% or 2%, and without having the Unemployment Rate rise above 4% or 5%.) And so forth. Be as specific as possible, and use statistics wherever appropriate. Remember, however, that these goals are not defined in any simple, precise fashion. They are concepts that can be more or less operationally-defined, and are targets to strive toward.

7. What functions are performed by Business Firms, Government (federal-state-local), Labor Unions, and Consumer Households? What changes have taken place over the years? (Answer: the rise of the giant corporation, increase in government spending, growth of labor union membership and power, etc.)

8. Don't have students simply read back, verbatim, the definitions and explanations given in lesson #21. Encourage them to define technology, automation, and cybernation in their own words.

Note: Be sure to give the final item high priority during class discussion. Show students that you are interested in responding to their needs and and interests.

## Lessons #25 - 33 -- Overview and Continuity

This nine-lesson unit introduces both the economic and noneconomic dimensions of the manpower market and world of work.

THE EVOLUTION OF THE INDUSTRIAL SYSTEM, lesson #25, provides the students with a perspective for viewing our changing economy and society, and sets the stage for lessons that follow. Social and economic change is one of the major themes in this lesson. (Lessons #21 and #22 also provide background on the role that technology has played in the evolution of our economy.)

Lesson #26 (THE NATURE AND FUNCTIONS OF WORK) discusses what work is and why men work. It also provides some historical perspective on the changing nature of work. The question of why men work and the emphasis on change found in lessons #25 and #26 can be used as means of assuring continuity with earlier lessons. (For example, lessons #1, 8, 10 raised the question of why men work.)

THE MANPOWER MARKET: MEN AND JOBS, lesson #27, provides an introduction to the manpower market. This lesson is built around the visual, "Success in the World of Work". The lesson contains supply and demand analysis of the manpower market.

Lesson #28 ("WHAT'S IN IT FOR ME?") returns to the question raised by lesson #26 of why men work. This lesson helps to pull together lessons #26 and #27 by discussing the economic returns to the individual for participating in the manpower market. The concept of investment in human resources and the relation between schooling and earnings is discussed in lesson #28. These last two concepts tie in with lesson #27's concept of education as an important factor affecting the supply and demand for labor.

A more detailed look at the noneconomic aspects of work is presented in the next group of lessons. THE JOB: SATISFACTION OR DISAPPOINTMENT, lesson #29, points out that jobs may have both positive and negative aspects. This lesson stresses the idea that we have many different needs and that a job may be a way of satisfying some of these needs.

Lesson #30 (MEASURING THE MANPOWER MARKET) returns to the economic aspects of the manpower market. This lesson introduces the concepts of labor force, employment, and unemployment -- all of which will be used in subsequent manpower market lessons. Lesson #30 provides more detail for lesson #27 and serves to set the stage for THE CHANGING MANPOWER MARKET, lesson #31, which is a detailed look at the supply side of the manpower market (changing size and composition of our labor force).

Lesson #32 (COLLECTIVE BARGAINING) is an introduction to institutional arrangements in the manpower market. This lesson can be used to show how institutions affect the operations of the manpower market.

THE LONG ARM OF THE JOB, lesson #33, returns to the theme of the non-economic aspects of work. This lesson points out that the job influences our total life.

To summarize the content of lessons #25-33: Lesson #25 provides a historical perspective on both the economic and noneconomic dimensions of the manpower market and world of work. Lessons #26, 29, 33 stress the noneconomic aspects of the manpower market and the world of work. Lessons #27, 28, 30, 31, 32 emphasize the economic factors in the manpower market.

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## #25 Evolution of the Industrial System

This lesson provides historical perspective for the ones that follow dealing with work and the manpower market. Its purposes are to reinforce the theme of economic change. Our system has changed in the past; it will continue changing in the future. The Industrial Revolution that began in 18th century England is significant -- and students should understand and remember it -- both as an important historical process and also as a symbol of ongoing technological-economic change. Some scholars feel that "the Industrial Revolution is still going on"; others say we have begun "a second Industrial Revolution". Robert Theobald argues that "the cybernation revolution" has thrust us into a new post-industrial era. Whatever you call it, the process of technological advance continues, at an accelerating pace, and man's economic and social environment (including the conditions of work) will continue to be altered throughout the future as it has been in the past.

References. There is no specific treatment of the theme of today's lesson in McConnell, in DEEP, or in other BMEL items. However, you can refer to encyclopedia articles, Robert Heilbroner's THE MAKING OF ECONOMIC SOCIETY, Bowditch and Ramsland's VOICES OF THE INDUSTRIAL REVOLUTION, and other sources.

Questions. The questions posed on page 2 are rhetorical and are answered in the ensuing paragraphs. On page 3, students are asked to "think of some other problems caused by the Industrial Revolution". SUGGESTED ANSWER: Many, including an obsessive concern for time and the clock; pollution of air and water by industrial production; periodic economic cycles, with unemployment and economic insecurity; social values dictated by the "market mentality", always insisting on getting something in exchange for giving something, whether it be money, goods, friendship, or love (reference: the works of Erich Fromm). ***Lower on the page, we pick up a theme that was mentioned on page one of lesson #20 -- the relative emphasis given to the output side and the input side of the production process. SUGGESTED ANSWER: You may need to start the discussion by pointing out that work has been viewed as a "painful" activity (the neo-classical economists' approach to explain the real costs of production). Work was regarded as a burden and sacrifice that was justified only because it was necessary in order to produce goods and services for consumption. But in the U. S. -- viewing the economy as a whole -- production has long since risen far above the level of basic needs. We have reduced the work week from 80 hours to 70 to 60 to 50 to 40, indicating that the needs of man as a worker have been given some recognition (less work, more leisure). Further emphasis on the worker's well-being, as opposed to the goal of producing the greatest possible quantity of consumer goods, might include improving the conditions of the workplace -- air-conditioned factories, reduction of noise level, landscaped grounds, attractive rest areas for coffee breaks, greater choice of working hours and days. Note that our economic accounting system (GNP, etc.) may introduce a bias in favor of more output rather than improved work conditions. We count only the production and consumption of goods and services. We have no adequate system for measuring the human costs and natural-resource costs of this production. You could also explore conflicts between the interests of workers and consumers (high wages, vs. low prices for goods), and between the interests of workers and society as a whole (right to strike vs. socio-economic stability.)

## #26 The Nature and Functions of Work

This lesson discusses the nature of work and raises the question of why men work. Most of the ideas in this lesson will be explored in more detail in later lessons. For example, it is not necessary to go into detail in defining such terms as occupation or career as they will be discussed more fully later. You might explain to your students that the word "job" is often used by people as a synonym for occupation. On occasion, we use the term job in the lessons as a synonym for occupation in order to have some variety in word usage. The ideas contained in the sketches on page 4 of the changing nature of work can be supplemented by referring to lessons #21 and #22.

Answers to Discussion Questions. ***"List three CAREERS you think you might like or dislike and be prepared to discuss them in class." SUGGESTED ANSWERS: There are no correct answers but be sure that students can make the distinctions among jobs, occupations, and careers. A career may involve several different jobs and more than one occupation. However, a career is distinguished from a series of jobs and/or occupations by being continuous and having a definite purpose. Lyndon Johnson -- teacher, member of Congress, President -- is an example of a man with a career in public service. Actually, few workers in the U. S. have careers. ***"What are some of the 'non-economic' purposes of work?" SUGGESTED ANSWERS: Social recognition and approval, mastery and achievement, accomplishment, good fellowship, appreciation of beauty, independence, creativity and challenge, and self-expression. For more answers and details see lesson #29, "The Job: Satisfaction or Disappointment?" Lesson #10, "The Joy of Work" also provides some insight into the noneconomic purposes of work. ***"Are workers better off today with automation and increased leisure than they were in 1800?" SUGGESTED ANSWERS: There is no correct answer. However, despite the presence of worker dissatisfaction with certain aspects of their jobs, most economists, sociologists, and psychologists who study the manpower market and the world of work seem to believe that on balance, and in general, the average worker is better off today. Economically, there is no doubt that the average worker's situation has improved tremendously since 1800. You can refer to lessons #21 and #22 for more ideas on this question.

Extra Discussion Question. "How do you view work? Is it a curse or a blessing for man?" SUGGESTED ANSWERS: No correct answer. Even the "experts" are not in complete agreement on whether work is a curse or blessing for man. However, most scholars seem to believe that work can be both a curse and a blessing for man. Work is usually neither entirely a burden or joy for man, but a combination of the two. See lesson #29 and the background readings for more details.

Background Readings

Anderson, DIMENSIONS OF WORK 1964, chapters 1, 2, 7, 8, and 11.

AFL-CIO, LABOR LOOKS AT AUTOMATION, December 1966, pp. 34 and 35.

Goodman, GROWING UP ABSURD, 1960, chapters 1 and 6.

CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967, pp. 1-4, 18-21.

## #27 The Manpower Market: Men and Jobs

This lesson is an important one because it sets the stage for all of the remaining lessons that deal with the manpower market. Subsequent lessons will discuss in more detail the institutions, processes, and policies that operate in the manpower market. The four supply and demand factors which are emphasized in this lessons will also be treated in more detail in later lessons. Throughout the remaining lessons the term "manpower market" is used as a synonym for the labor market. We prefer the term manpower market rather than labor market because it emphasizes man and can be used as a more encompassing term. For example, some economists look at education as being a factor that is external to the labor market. We include education in our manpower market model.

Some of the ideas in this lesson have been introduced earlier in the course. For example, see lesson #2 page 2 for a definition of labor and lesson #5 page 3 for a brief discussion of competition in the manpower market. The term "job markets" is used as a synonym for manpower or labor markets in order to have more variety in word usage. These markets are not really markets for specific jobs. If the students have trouble with understanding the model of the manpower market we have at the top of page 1, you can refer them to lesson #14, pages 1 and 2.

### Answers to Discussion Questions

1. SUGGESTED ANSWER: It caused a decrease in the number of buggy-whip workers that were employed.
2. SUGGESTED ANSWER: In absolute numbers, the effective demand (i.e., employment) for unskilled workers today is just about equal to what it was in 1947. However, the relative demand for unskilled workers is much lower today than it was 20 years ago. The demand for skilled and semi-skilled workers, and for labor in general, has increased substantially over the years, while the demand for unskilled laborers has not. The skilled occupations are those in which the demand for workers is growing relatively the fastest. The organization of production in our economy is such that skilled workers make the greatest contribution. Increasingly skilled workers are more in demand than unskilled workers.
3. SUGGESTED ANSWERS? Education and training, attitudes and values, the amount and type of capital equipment the worker has; the quality of managerial know-how is organizing production; and institutional factors such as labor unions and employee relations.
4. SUGGESTED ANSWER: No. The demand for health services is increasing rapidly as Americans want and are able to pay for better health services. Population growth also means that there are more people who need medical services. The supply of doctors has not been increasing very rapidly due to the nature of training -- several years are needed to acquire the needed knowledge and proficiency -- and the limited number of openings available in medical schools.

Page 3 -- "What are some of the attitudes which you think will increase your chances of successful participation in the manpower market?" SUGGESTED ANSWERS: Taking your job seriously, wanting to do a good job, willingness to take and follow orders or instructions, being responsible for your work, trying to get along with your fellow workers, wanting to learn new skills and enhancing your old skills, and having learned employability skills -- information, communication and mobility -- that will get you a job in the first place.

Page 3 -- "How do you think your education will influence your participation in the manpower market?" SUGGESTED ANSWERS: Education and training are an important source of learning skills. The possession of the right skills will enhance employability. Education and training also influence the attitudes and values workers have toward their jobs. Certain attitudes and values in workers are held in high esteem by employers. The educational attainment of the other members of the labor force influences the individual's chances for employment in the manpower market. Education also is a major factor in stimulating productivity and economic growth, which -- because of the derived nature of demand for labor -- will affect the individual's employment opportunities.

Page 3 -- "Does a change in the level of income of consumer households influence the total demand for labor in the manpower market?" SUGGESTED ANSWER: Yes, because of the derived nature of the demand for labor.

Extra Discussion Questions

1. "What else besides wages and salaries do workers consider when deciding whether to take a particular job?" SUGGESTED ANSWERS: Fringe benefits, hours of work, location of job, prestige associated with job, fellow workers, working conditions, type of enterprise which has job, and alternative jobs available.

2. "What are some of the factors which influence the supply of labor in the manpower market?" SUGGESTED ANSWERS: Trends in population and labor force participation rates; the education, training, attitudes, and values of workers; size and composition of the labor force; labor unions; manpower market information and mobility of workers.

3. "What factors influence the total supply and total demand for physicians?" SUGGESTED ANSWERS: Demand -- level of income, general health condition of population, prices of medical services, state of medical science. Supply -- income and prestige available in medicine and other occupations, number of medical school students and number of potential young men and women who can train to be physicians.

Background Reading

Bowen and Mangum (eds.), AUTOMATION AND ECONOMIC PROGRESS, pp. 18-20.
Calderwood, ECONOMIC IDEAS AND CONCEPTS, pp. 14-15.
McConnell, ECONOMICS, chapter 31.

## #28 "What's In It for Me?"

The economic value of education will be developed as a major theme of the course. This lesson is merely the first of several on the subject. Resist the temptation to exhaust the topic with this one lesson alone. There will be additional opportunities to consider education and earnings in later lessons. Don't require your students to memorize all the data in Tables I and II.

There is some deliberate repetition of data presented earlier in lesson #9 (Wages, Earnings, and Family Income) and also #26 (The Nature and Functions of Work). Our purpose is reinforcement of learning.

The concepts of "investment in human resources" and "human capital" are introduced briefly, without elaboration. The next time students see these terms, they'll sound familiar. Students will then hopefully be prepared for deeper analysis. Schooling is like investment in that it involves the use of human and other resources to "produce" greater understanding and skill in people. By increasing the potential productivity of future workers, schooling adds to their "human capital" -- the "equipment" they will use in production.

Lifetime earnings have not been estimated for women, because labor force participation and employment of women have been much less stable than for men. Finally, in Table I, it is noted that lifetime earnings are estimated for the 46-year period from age 18 to 64. A man who spends four years in college delays his entry into the labor force by four years and must accumulate his lifetime earnings in only 42 years (from age 22 to 64).

References. Item #12 in the Basic Manpower Economics Library, THE ECONOMIC RETURNS TO EDUCATION, contains a discussion of education and earnings on pp. 6-17. Item #p-8 is a colorful chartbook that could be used in an attractive bulletin board display (note especially pp. 3 and 19).

Questions. Page 3 -- (top), workers with more schooling generally can qualify for better paying jobs. School training helps improve work skills, which raises productivity, and makes them worth more to employers. In addition, some employers discriminate in favor of people with more schooling even though the additional schooling might not make a worker more productive on a particular job. Page 3 -- (bottom), the monthly earnings of a high school dropout average $385 (i.e., $212,000 divided by 46 years equals $4,610, divided by 12 months equals $385). Average monthly earnings for a high school graduate, as reported in Table II, are $450. Differences between $450 and $385 is $65 per month. This could be used to buy a variety of things, such as a suit of clothes, dinner at a nice restaurant and a movie for a family of four once a week or more often, monthly payment on a new car, addition to the Christmas fund or summer vacation fund, etc. etc.

## #29 The Job: Satisfaction or Disappointment?

This lesson discusses in more detail the theme of employment as a source of personal satisfaction which was first mentioned in lesson #10 "The Joy of Work". This theme is also explored in even more detail in lessons #36, 38, 39 and is one of the major themes of the course. We want to be sure that the students understand that employment can be a source of more than just income. We are interested in emphasizing the positive non-economic aspects of working at a job. On the other hand, we don't want to paint too rosy a picture of the amount of satisfaction that workers get from their jobs. The list of twelve needs of man that can be satisfied through work comes from R. H. Schaffer, "Job Satisfaction As Related to Need Satisfaction of Work", Psychological Monograph 364, 1953, p. 1. A useful discussion of work and the needs of man is contained in "Psychological Dimensions of Work", CFEE Technical Paper #2, pp. 4-14.

### Answers to Discussion Questions

Page 1. "Here are a few examples, and you can add some others you think of:" SUGGESTED ANSWERS: Will vary. See this lesson and CFEE "Psychological Dimensions of Work", p. 3 for a list (e.g., brings self-respect; no prestige).

Page 3. "Which of the needs seem most important to you?" SUGGESTED ANSWER: There is no single correct answer. ***"As students in school, rather than employees on a job, how do you get some of these needs fulfilled?" SUGGESTED ANSWERS: Will vary but may include mentioning of school, church, home, classmates, family, friends, hobbies, sports, and leisure time activities. ***"Give some concrete examples of positive and negative feelings that workers have about their jobs?" SUGGESTED ANSWERS: Will vary but could include list of ideas contained on page 3 of CFEE "Psychological Dimensions of Work" (e.g., permits service to others; reduces self-respect).

### Extra Discussion Questions

1. You or the students could pick one of the twelve needs and list as many different ways this need could be fulfilled by a man on his job. SUGGESTED ANSWERS: No correct answers. An example would be a worker's need for dominance which could be fulfilled by becoming a supervisor or foreman, labor union steward, or work group leader.
2. "Why do workers have negative feelings toward their jobs?" SUGGESTED ANSWERS: The jobs don't fulfill some of their needs or may actually frustrate the fulfillment of other needs.

### Background Readings

Anderson, DIMENSIONS OF WORK, 1964, chapter 7, pp. 8-10.
Goodman, GROWING UP ABSURD, 1960, chapters 1, 2, 7, and 8.
CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967, pp. 2-14, 18-21.
Gardner, SELF-RENEWAL, 1965.

## #30 Measuring the Manpower Market

This lesson is important because it provides detailed information on three manpower market concepts which are used in the lessons that follow. The aim of this lesson should not be for the student to know all the details of defining who is in or out of the labor force or who is employed or unemployed. Rather, after this lesson, the student should be able in his own words to define the terms labor force, employment, and unemployment.

You may want to point out to the students that in January 1968 the Bureau of Labor Statistics made some important changes in the definitions of labor force, employment, and unemployment. (See Manpower Report of the President 1967, page 195 for a brief discussion of these changes.) The statistical appendix of the MANPOWER REPORT OF THE PRESIDENT, pp. 195-276, could also be used to illustrate some of the details in labor force statistics which are readily available. The rule for distinguishing between those in or out of the labor force is a general rule. There are a couple of exceptions to the rule, but the students don't have to worry about them.

The fourth page of this lesson, "Summary of Occupational and Industrial Classification Systems", is an appendix of some additional concepts used to classify and measure the operation of the manpower market. These classification systems are explained in some detail in lesson #34, 35, 37, 40. Since this listing will be a handy summary sheet for the students, you will want to be sure to mention it to them even though a more detailed explanation will not be made until lesson #34.

### Answers to Discussion Questions

"In your own terms, define labor force, employment, and unemployment." SUGGESTED ANSWERS: Will vary, but responses should distinguish between in and out of the labor force, and employment and unemployment.

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### Extra Discussion Question

1. "What general rule can you apply to know whether a person is in or out of the labor force?" SUGGESTED ANSWER: Activity differentiates workers in the labor force from people not in the labor force. Activity involving work classifies one as employed; activity involving looking for work classifies one as unemployed.

### Background Reading

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, 1965, chapter 2.
Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, 1964, chapters 1-6.
Federal Reserve Bank of Richmond, KEYS FOR BUSINESS FORECASTING, 2nd ed., August 1966, pp. 8-11.

## #31 The Changing Manpower Market

This lesson should help the students develop a sense of the changing nature of competition in the manpower market. Its purpose is to familiarize the students with major trends in the changing labor force. Don't dwell on all the detailed data that is provided. The core of this lesson is contained in the summary on pp. 3, 4. Chart I is merely a device for displaying data rather than presenting facts which have to be learned. The questions are designed to help students identify trends in the composition of the labor force. (This use of questions for students to answer, to be sure they understand the charts and tables, will be used in most of the manpower market lessons that follow.)

In order to provide your students with some economic analysis of the causes of the changing size of the labor force, you may want to explain to them that the size of the labor force is primarily a function of the size of the population and its age and sex. Larger populations beget bigger labor forces. Another factor which affects the size of the labor force is the general level of economic activity. The greater the growth rate of the economy the more additional workers will enter the labor force. In case the question would come up in class, the "under 20 years of age" category in Chart I refers to workers from age 14 to 19. Using the current lower age limit of 16 would affect the figures in the charts only about 1%.

Answers to Questions: Page 2. Ia--False; Ib--False. Page 3. #1, SUGGESTED ANSWER: Will vary, but should suggest that there will be plenty of competition for jobs, especially the better ones. #2, SUGGESTED ANSWER: The need to provide specific jobs for all of these laborers. Our economy could create jobs that each worker could become qualified for. However, institutional changes have to be made before a matching in the manpower market will take place. Unemployed youth, especially in our urban ghetto areas, are "social dynamite". They could be the source of a great number of problems for society. Women are potential rivals for jobs with men who are heads of families. To the extent that they create unemployment for men who are heads of families, they contribute to serious economic problems such as poverty. Mothers of young children who work may create psychological and social problems for their children and society. #3, SUGGESTED ANSWER: Will vary, but can include the following ideas: Women want more income for themselves or their families, a job may be an escape from their household duties (which they may consider dull and unchallenging), and certain noneconomic aspects of work (e.g., companionship, shared tasks, usefulness) may appeal to them.

Background Reading


Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, 1964, chs. 8-10.

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, & PUBLIC POLICY, 1965, pp. 10-11, 14-15, 192-193.

McConnell, ECONOMICS, 3rd ed., 1966, pp. 357-360.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 edition, pp. 17-18.

U. S. President and U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT 1967, pp. 34-36, 126-129, 133-134, 137-138, 201-208.

U. S. Department of Commerce, Bureau of the Census, POCKET DATA BOOK U.S.A. 1967, pp. 127-128.

## #32 Collective Bargaining

The aim of this lesson is to provide the students with an insight into how institutional arrangements, e.g., collective bargaining, affect the operations of the manpower market. Our purpose in discussing collective bargaining is to reinforce the idea that workers can exercise some control over their wages, hours, and working conditions. (You will recall that this was a major theme in lesson #19, "The Role of Labor Unions".) Collective bargaining is also discussed because it is the basic answer that labor unions use to meet the needs and demands of their members.

Table I may be somewhat difficult for students to understand because of terminology. You will want to explain the meaning of some of the terms to the students. For example, column 3, "Average Duration", refers to the average number of days that strikes lasted. Column 5, "Percent of Total Employed" represents the number of workers in nonagricultural employment who were involved in work stoppages as a per cent of the total number of such workers. Workers were counted more than once if they were involved in more than one stoppage during the year. "Man-days Idle" refers to an eight hour day that was not worked due to a work stoppage. "Percent of Estimated Working Time", column 7, represents the total number of man-days lost due to work stoppages as a percent of the total number of man-day's worked by all employed workers.

### Answers to Discussion Questions

1. SUGGESTED ANSWER: Process of settling the terms and conditions of employment through the negotiation of agreements between employers and labor unions.

2. SUGGESTED ANSWERS: Will vary, see p. 2 of this lesson for possible answers.

3. SUGGESTED ANSWERS: Will vary, but should include ideas on page 2 of this lesson.

4. False. 5. False.

I-1. No. I-2. No. I-3. Less than 1/5 of 1%. I-4. True. I-5. No.

### Extra Discussion Questions

1. "The major issues that led to work stoppages in 1965 were: General Wage Changes, Union Organization and Security, Plant Administration, Inter and Intra Union Matters, and Job Security. How do you think these issues ranked (1, 2, 3, 4, 5) in terms of the number of work stoppages they caused?" SUGGESTED ANSWER: Their actual ranking in 1965 is identical to the sequence in which they are listed in the question. See POCKET DATA BOOK, U.S.A. 1967, p. 135.

2. "What is your evaluation of the effectiveness and success of collective bargaining?" SUGGESTED ANSWER: Will vary. Should show that despite problems and limitations, collective bargaining does work and performs a vital function in our economy. These who doubt the worth of collective bargaining, might be asked what they would substitute for it. How would they have the workers and management settle the issues and conflicts that collective bargaining does?

3. "Fair-minded employers and fair-minded workers can get along well with each other, without unions. Comment." SUGGESTED ANSWER: Will vary. Did they before unions were organized and collective bargaining was established? Are there legitimate conflicts of interest between (cost-conscious) employers and (income-conscious) workers?

4. "Employers never pay workers more than they absolutely have to." Comment. SUGGESTED ANSWER: Will vary. Since "never" is used, answers should suggest statement is not true. You might change question to read "Employers <u>should</u> never ..." to find out what students think about the relationship of pay to efficiency and to justice in the work place.

<u>Background Reading</u>

McConnell, ECONOMICS, 3rd ed., 1966, pp. 655-665.

Calderwood, DEEP -- ECONOMIC IDEAS AND CONCEPTS, 1964, p. 39.

American Federation of Labor and Congress of Industrial Organizations, COLLECTIVE BARGAINING, DEMOCRACY ON THE JOB, July 1965.

## #33 The Long Arm of the Job

We want the students to gain insight into how a man's job can affect his whole way of life. This lesson is merely an introduction to the theme of the "long arm of the job" which will be discussed in more detail in later lessons. The lesson raises a number of questions which we hope you will discuss in some detail with the class. Take care to avoid overstating the theme that "the job has a long arm". Certainly there are workers who manage to separate their work entirely from their off-the-job lives. A TV commercial played on this theme: the bulldozer operator whose hobby is painting seascapes; the carpenter who spends his weekends yachting; the sales clerk who attends symphony concerts and ballet performances. A job will influence the worker's life style, unquestionably; but it need not exert a totally deterministic influence in the case of each and every worker. The quote in the second paragraph, "What a man is ... does.", has been adapted from an interesting article by Marc A. Fried, "Is Work A Career?", Trans-action, September-October, 1966.

### Answers to Discussion Questions

Page 1. 1-- SUGGESTED ANSWERS: Our needs are influenced by our environment. Obviously, the environment of an unemployed worker is different from that of a man with a job. The job can also be a source of need-satisfaction. If a man is unemployed, this source is not available and he must look elsewhere to get his needs satisfied. 2--SUGGESTED ANSWER: If you enjoy your work you are more likely to perform at a higher rate of efficiency. 3--SUGGESTED ANSWER: In our society the "success" or "failure" of a man is often defined in occupational terms; and some jobs are more likely to bring success than others. For example, jobs which are appropriate for your skills, attitudes, values, are most likely to bring you occupational success. Page 2-- "How can your job, your occupation, your career have an influence on each of these facets of your life?" SUGGESTED ANSWERS: Will vary and are almost unlimited in number.

### Extra Discussion Questions

1. Ask the students to give some examples of how their parents' jobs affect their lives.
2. You could ask the students to comment on the following: A well-known business and data processing machine producer has gained the reputation of telling its management trainees that if they expect to gain promotions in the firm "they are expected to conform to certain rules of behavior, dress, etc."
3. Have students describe how they think one specific occupation (e.g., plumber, doctor, bus driver, farmer, policeman, drill press operator, sales clerk) influences that worker's style of life.

### Background Reading

Anderson, DIMENSIONS OF WORK, 1964, chapter 7, pp. 133-144.

Goodman, GROWING UP ABSURD, 1960, chapter 1, 3, 7, 11, pp. 3-16.

CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967, pp. 1-5.

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, 1966, pp. 144-166.

## Lessons #34 - 42 -- Overview and Continuity

This unit on the manpower market discusses the number and types of workers currently employed in the American economy and reports some of their feelings about participation in the world of work. There is a mixture of economics lessons (#34, 35, 37, 40, 41) and psychological lessons (#36, 38, 39, 42) in the unit.

The mixing of the two themes was done to provide some variety in the student lessons. The economics lessons contain a great deal of statistical data while the psychological lessons -- with the exception of #39 and #42 -- are nondata lessons. The economic and psychological lessons in this unit put flesh on the bones of the manpower market (which was described in lessons #27, 30, 31, 32) and the larger world of work (which was discussed in lessons #10, 26, 29, 33).

Lesson #34 (FINDING THE TREES IN THE EMPLOYMENT FOREST) is an introduction to a detailed examination -- provided in lessons #35, 37, 40 -- of the occupational and industrial basis of employment in our economy. This lesson includes important data on occupational and industrial employment and a U. S. Bureau of Labor Statistics employment classification system.

Lesson #34 is one of the <u>most</u> <u>important</u> in the whole course because it explains the concepts and terminology used to describe patterns of employment. Many of the lessons that follow will make use of such terms as blue-collar occupations, service-producing industries, and the other BLS classifications.

ON TOP IN THE SERVICE-PRODUCING ERA, lesson #35, is a detailed look at white-collar employment in our economy. Descriptions and data on white-collar work are provided for students to develop a sense of the role that white-collar workers play in our economy.

Lesson #36 (AN AFFAIR OF THE HEART) is a change of pace for students after two days of employment lessons containing a great deal of data. The lesson is concerned with the satisfactions it is possible to get from successful participation in the manpower market. It is a lengthy case study (you may want to hand it out to be read in advance) of a woman surgeon and is the first time we have emphasized the role of <u>women</u> in the manpower market and the world of work. (Lessons #41 and #50 are also devoted to the changing role of women in the manpower market and the implications of these changes.)

Lesson #36 provides an excellent means of reviewing some of the major themes that have been developed in the course. For example, the lesson supports the proposition stressed in lesson #29 that a job can be a source of human satisfaction. You will recall that the idea that jobs can be a source of satisfaction was also mentioned in lesson #1, 10, and #26. This understanding is one of the major ones that students ought to learn from this course.

FARM, BLUE-COLLAR, AND SERVICE WORKERS, lesson #37, is a description of the type of work done and the employment record of farm, blue-collar, and service workers.

Lesson #38 (MAKING SOMETHING OUT OF YOUR JOB) is a change in subject matter and style from the preceding lesson. It contains three short case studies which illustrate the theme that our ideas and attitudes shape our work. This lesson should help students see that they are not at the mercy of a job but can exert some control over it by their ideas and attitudes.

Lesson #38 ties in with lesson #36 and helps prepare students for lesson #39 ("A SURE SENSE OF HIS OWN USEFULNESS") which also suggests that ideas and attitudes can influence the satisfaction we get from employment. (Subsequent lessons will encourage students to evaluate themselves and their employment opportunities, building on the idea that we can influence the role we play in the manpower market and world of work.)

Lesson #39 presents some data on job satisfaction by occupation, and on the factors that workers think are important about their jobs. This lesson gives the students psychological data which would be valuable in thinking about employment opportunities and occupational planning -- the major topics of the next unit.

THEY GET THE WORK DONE IN AMERICAN INDUSTRY, lesson #40, summarizes the material contained in lessons #34, 35, 37 on employment.

Lesson #41 ("...BUT WOMAN'S WORK IS NEVER DONE") shows the part that women play in our employment picture and their changing role in the labor force. This lesson is closely related to lessons #46 through #52 in its emphasis on helping students -- especially the girls -- analyze themselves. Lesson #41 also is a continuation of the emphasis on women found in lessons #31, 35, 40, 41, 43.

WORK AND MENTAL HEALTH, lesson #42, explores the relationship between a person's needs, his job, and his mental health. It also briefly discusses some of the pressures and problems that our industrial society creates for the worker. This lesson suggests that a person's general well-being depends in part on his mental health, which in turn is often related to his participation or nonparticipation in the manpower market.

Lesson #42 is a continuation of two themes that have appeared earlier in the course: A job may be a source of satisfaction or dissatisfaction (e.g., lessons #29, 36, 38, 39); and regardless of how you feel toward a job, it will affect your way of life (e.g., lesson #33).

## #34 Finding the Trees in the Employment Forest

This is one of the most important lessons in the course. Students should begin to get a "feel" for the terms that are used to classify jobs in our economy and a rough idea of what these various workers do and how many of them there are. You may want to make use of pictures to illustrate the various types of occupations. Scrap books, paintings or drawings could be used to quiz the students on their understanding of occupational categories.

The term "job" is used in this and other lessons as a synonym for occupation. This popular use of the term may not be technically correct -- jobs really are subdivisions of occupations referring to specific duties performed in an occupational setting -- but it is widely used and gives us more variety in our writing.

The occupational and industrial classification systems we use in this lesson are the ones used by U. S. Department of Labor, Bureau of Labor Statistics. These classification systems are widely used in presenting national manpower data. However, they are not the only ones used by the U. S. Government and others. You may want to check L. Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, 1966, chapter 3, to get a look at the U. S. Census Bureau's classification system.

Point out to your students that there are some problems involved in using the terms skilled, semiskilled, and unskilled when referring to occupations. These terms have double meanings; they can refer to the actual BLS occupational categories, or they may designate general levels of skills present in certain occupations. For example, a professional worker is certainly a "skilled" worker, but the BLS's "skilled" category doesn't include professional workers. Also, farm laborers are basically as "unskilled" as nonfarm laborers; but they are classified differently by BLS. You want your students to be clear in what they mean when talking about unskilled, skilled, and semiskilled workers.

The term "industry", "industrial group", and "industrial classification system", may cause some confusion among the students. The industrial classification system refers to BLS's nine-fold breakdown of the types of industries. An industrial group or division is one of the BLS's nine categories. The term industry refers to the individual industries which may be identical with BLS's categories, or may be a subdivision of a BLS category (e.g., real estate), or may be included in a BLS category, as steel is included in manufacturing.

When you use the term service workers be sure that you identify whom you are talking. In this, and all subsequent lessons unless otherwise identified, "service workers" refers to those workers in the BLS category of Service Workers. This term sometimes is used to identify all the employees of service-producing industries. Employees in trade, finance, insurance, real estate, and service and miscellaneous -- the so-called "gray-collar" workers -- are also called service workers by some writers.

In our "Summary of Occupational and Industrial Classification Systems" <u>see</u> lesson #30, p. 120) there are some "refinements" made that are not explained in the student materials. For example, "managers, officials, and owners" also are called "Managerial". This occupational group doesn't include farm managers and owners -- note the "nonfarm". The farm managers and owners are included in "Farmers and farm managers, laborers, and foremen." "Laborers" always excludes farm laborers, who are included in "Farmers and farm managers, laborers, and foremen." Mining laborers are also excluded from "laborers". Sometimes the term "nonmining" is not used after laborers. But if Monthly Household Survey or U. S. Census data is being used, mining laborers are excluded. Miners are classified as mine operatives and laborers and included in the "Operatives" category. When we use terms "laborers", unless otherwise stated, we are talking about nonfarm and nonmining laborers. "Goods-Producing" industries may exclude the agriculture industry. Usually this exclusion is identified by the label "Nonagriculture goods-producing industries". Unless indicated otherwise we mean all goods-producing industries when using the term goods-producing. Goods-producing industries also have been called "Production industries". "Contract Construction" is also called "Construction". "Manufacturing" sometimes is further broken down into durable and nondurable goods.

The "Mining" industrial category also includes the forestry and fishing industries. "Service-Producing" industries are sometimes referred to as "Service industries" but not by us. "Government" includes the local, state, and federal governments and public school personnel. Sometimes "Public Administration" is used instead of "Government" for this industrial category. "Transportation and Public Utilities" includes the communication industries. The "Trade" industrial category is sometimes divided into wholesale and retail. The "Service and Miscellaneous" category includes medical, repair, services, and private educational services.

<u>Answers to Discussion Questions</u>

Page 3. 1. SUGGESTED ANSWER: A type of work activity in which certain skills are required. The nature of the jobs that are performed by the workers in each type of occupation have a great deal in common. Another definition is the trade, profession, or type of work performed by the individual irrespective of the branch of economic activity to which he is attached. In this definition, "branch of economic activity" refers to what is called "industry". The different branches corresponding to the different industries. See Anderson, DIMENSIONS OF WORK, 1964, pp. 25-28.

2. SUGGESTED ANSWER: White-collar occupations involve: more direct dealing with people and less with things; generally, higher educational requirements; more working in office, classroom, laboratory, and sales area; generally, higher earnings -- especially for men; and more use of communication and less of manipulative skills.

3. SUGGESTED ANSWER: Perform protective, personal, building, and private household services. Feed us, groom us, clean our houses and office buildings and protect our lives and property from harm.

4. SUGGESTED ANSWER: There are a large number of "women's work" types of jobs in this category. For example, teaching -- especially in elementary and secondary schools; nursing, sales -- especially retail; and clerical -- especially secretaries and stenographers. They involve more pleasant "surroundings" than blue-collar or farm occupations. Don't laugh, studies have shown that women workers place the highest importance on "surroundings" when describing what they look for in the emplcyment situation. Opportunities for part-time employment is good in these types of jobs, and this appeals to many women.

Page 4. "Identify the following industries as either goods-producing or service-producing." Agriculture G, Trade S, Manufacturing G, Real estate S, Government S, Mining G, Finance S, Construction G.

Extra Discussion Questions

1. You may want to find out what the students' attitudes are toward occupations. One way of doing this, would be to ask them to respond (True or False) to the following propositions:--White-collar work is superior to blue-collar or manual work.--Self-employment is superior to working for others.--Clean occupations are superior to "dirty" ones.--The importance of business occupations depends upon the size of the business.--Personal service occupations are degrading (i.e., It is better to be employed by an enterprise than to provide personal services to an individual.) SUGGESTED ANSWER: Since these are attitude questions there are no "right" answers. However, manpower "experts" would maintain that these assumptions are not, and should not necessarily be true.

2. "In which of the various types of occupations (see list on page 120, lesson #30) would you like to be employed? Why?" SUGGESTED ANSWER: Will vary, no correct answer to questions 2-5.

3. "In which of the industries would you like to be employed? Why?"

4. "In which of the occupational groups would you prefer to work: White-collar, Blue-collar, Service, or Farm? Why?"

5. "Of all the occupations we discussed, which do you like least? Why?"

6. "What do you think it takes to be a 'success' in any occupation?" SUGGESTED ANSWER: Education, training, talent, ability, money, "pull", good looks, knowing the right people, hard work, good morals, luck, nice personality, and strong character. Responses will vary.

Background Readings

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition.

L. Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, 1966, chapter 3.

U. S. President and U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT 1967, pp. 211-212, p. 248, p. 274.

S. Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, 1964, pp. 77-82 and 188-191.

U. S. Department of Labor, Bureau of Employment Security, DICTIONARY OF OCCUPATIONAL TITLES, 3rd Edition, 1965. (Two volumes).



M&EE:oael/rldpep/1968/03/TM#34

## #35 On Top in the Service-Producing Era

This lesson and lessons #34, 37, 40 should help the student develop an understanding of various types of work people do and their relative importance in the economy as measured by employment figures. The object of these four lessons on employment is not for the students to learn all the employment figures for various occupational groups, but to begin to develop a "sense" of the type of work done by different groups of workers and the number of workers in each group. Lessons #34, 35, 37, 40 are the foundation on which all the remaining lessons involving occupational planning are built. Intelligent career planning is based on an understanding of the current and projected employment picture. You may want to remind the students that lesson #30 Measuring the Manpower Market has the outline of the employment classification system used in this and the following lessons. Note that we don't say that all white-collar workers get higher pay than other groups of workers. They certainly do not.

### Answers to Discussion Questions

I-a. SUGGESTED ANSWER: False. I-b. SUGGESTED ANSWER: True. I-c. SUGGESTED ANSWER: True. II-1. SUGGESTED ANSWER: Many of the jobs in this occupational group are considered "woman's work". Women are interested in office work because of the surroundings -- and a large portion of clerical jobs are in offices. These jobs do not tend to be highly specialized or call for any great amount of technical knowledge. Almost all of these jobs can be performed with little or no additional education and training beyond high school. Since the majority of women do not go to college, these are jobs they can readily perform. II-2 a. SUGGESTED ANSWER: True. II-2 b. SUGGESTED ANSWER: False. PAGE 5. 1. SUGGESTED ANSWER: True. 2. SUGGESTED ANSWER: Retail, because it is often thought that men would rather buy from men than women -- especially in those fields where salesmen are dealing with businessmen. The educational requirement expected of nonretail salesmen is usually higher. Part-time sales work, which often is eagerly sought by housewives, is more readily available in retail sales. 3. SUGGESTED ANSWER: No correct answer. Will vary.

### Extra Discussion Questions

Chart I. 1. "Scientific and technical occupations accounted for more employment in 1965 than did the teaching professions. Please check the correct answer." True ✓ False ____.
Chart II. 2. "Why do you believe that more men are not employed in clerical occupations?" SUGGESTED ANSWER: See answer II-1 of this lesson. 3. "Which of the professional and technical occupations do you think will show the greatest relative growth in employment in the period 1964-1975?" SUGGESTED ANSWER: According to BLS, these look like some good candidates: technicians (nondraftsmen), + 61%, engineers, + 54%, and registered professional nurses, + 43%.

### Background Reading

U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 1966-67 Edition, pp. 22-230.

## #36 An Affair of the Heart

This case study should increase awareness of the satisfaction that can be derived from a job and provide students with a means for reviewing a number of our major themes. The lesson can be handled very easily in a class period -- especially if the case is read in advance outside of class. You will note that "Today's Lesson in Brief" is presented in a different form. The reason for this change of format is to encourage students to use this case study as a means of reviewing the major themes and concerns of the course. The effectiveness of this lesson can be increased if you ask the students to read it outside of class and write their answers to the questions that are asked. Class time should be devoted to discussing their answers to the questions -- especially the final question in "Today's Lesson in Brief". You may want to list the themes on the blackboard as they emerge from student answers.

Answers to Discussion Questions

1. SUGGESTED ANSWERS: Will vary, but should include ideas about working because she wants to fulfill herself as a human being (i.e., develop and use her capabilities) and make a contribution to society.

2. SUGGESTED ANSWERS: Will vary, but should include some of the following: self-expression, independence, social welfare, challenge and creativity, status, interpersonal relations, mastery and achivement. You may want to refer back to lesson #29 for a list of satisfactions that it is possible to get from a job.

3. SUGGESTED ANSWERS: Will vary, but could include the idea that it does somewhat limit her family and social life in the sense she may not have as much time available for it as other married women who don't have jobs. However, the fact that her job takes time doesn't mean that she hasn't any time for social life. It does mean that she has to plan the use of her time carefully. It is almost certain that Dr. Nina's job actually is an asset to her family and social life rather than as liability. Her obvious pleasure in doing her work probably enhances her value as a wife, mother, companion, friend, and citizen.

4. SUGGESTED ANSWER: Yes, although the effect that a job has on a person's family and social life varies because people and jobs differ. Any job will influence one's family and social life. No worker is ever entirely free from the "long arm of the job."

Page 5. "What did you learn from the case study of Dr. Nina Starr Braunwald?" SUGGESTED ANSWERS: Will vary, but should include some of the major themes that are in the answers to the next question.

Page 5. "What major themes and concerns that we have studied in this course are illustrated in her life story?" SUGGESTED ANSWERS:

-- Successful living often involves a blending of meaningful work on the job and purposeful activity and leisure away from the job.

-- There is a direct relationship between achievement in one's occupation and public recognition in our society.

-- There is a need for continuing education in order to continue to excell in one's occupation.

-- There are employment opportunities for women in jobs that are often considered men's work.

-- Education and training are the keys that open the gates to rewarding careers.

-- There is an opportunity cost involved in obtaining education and training (e.g., studying on dates instead of movies and dancing; see p. 3 of lesson).

-- Leisure is an important part of our live.

-- It is possible to live a full and happy life, without necessarily following the traditional roles that our society expects.

-- An occupation may be a means to greater personal freedom, satisfaction, and fulfillment.

-- Jobs requiring great skill and competence are open to qualified women. It is also a "women's world".

-- Some people feel they have an obligation to society to pay back the cost of their education and training, through work and service to people.

-- Working at a job doesn't necessarily make a woman less feminine.

-- Being a woman can be an advantage in certain types of jobs. (Page 3, seventh paragraph.)

-- It is possible for a woman to successfully combine the roles of wife, mother, and worker.

-- The job does influence our whole way of life: the "long arm of the job."

-- Important jobs in our economy are often performed by relatively young people.

-- Leisure time activities may involve job-related skills. (Sculpture and anatomy, p. 5.)

Extra Discussion Questions

1. "What do you think are some of the major factors which make workers satisfied with their jobs? Dissatisfied with their jobs?" SUGGESTED ANSWER: See lessons #29 and #39.
2. "What satisfactions will you want to get from your occupation?" SUGGESTED ANSWERS: Will vary.
3. "What types of jobs do you think are most likely to bring you the type of satisfaction you will be seeking from work?" SUGGESTED ANSWERS: Will vary.

Background Readings

Anderson, DIMENSIONS OF WORK, 1964, chapters 7, pp. 8-10.
Goodman, GROWING UP ABSURD, 1960, chapters 1, 2, 7, and 8.
CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967, pp.2-14 and 18-21.
Gardner, SELF-RENEWAL, 1965.

# #37 Farm, Blue-collar, and Service Workers

The purpose of this lesson is to give the students a sense of what the workers in these three occupational groups do and their relative importance in the economy.

## Answers to Discussion Questions

PAGE 2. I-1. SUGGESTED ANSWER: The large numbers of automobiles in the country (75 million passenger car registrations in 1965.) I-2. SUGGESTED ANSWER: According to BLS, these look like some good prospects: painters, + 77%; operating engineers, + 43%; and plumbers and pipefitters, + 25%. I-3. ANSWERS: a--True; b--True; c--False.

PAGE 3. 1. About 20%. 2. Drivers. 3. SUGGESTED ANSWER: By tradition, it is not considered "woman's work". These jobs require physical strength. Men don't necessarily want women in the shops or factories. The surroundings are physically unattractive. Many of these jobs involve dangerous work.

PAGE 4. "Why do you suppose there are relatively few jobs for unskilled laborers in today's economy?" SUGGESTED ANSWER: Machines are doing much of the work formerly done by laborers. More integration in our manufacturing processed has eliminated some jobs in shipping, handling materials, etc.

1. SUGGESTED ANSWER: 2 million. 2. SUGGESTED ANSWER: Two-thirds. There are six million personal and building service workers out of a total of nine million service workers.

## Extra Discussion Question

"Of all the occupations discussed in this lesson, which ones do you think might offer the best career opportunities for you? Why?" SUGGESTED ANSWER: Will vary. The boys may prefer truck driving. Ask them why. The girls may prefer cosmetologist and waitress. Ask them why.

## Background Reading

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 331-571 and 792-807.

## #38 Making Something Out of Your Job

This is a short lesson that could be taught the same day, with #39 ("A Sure Sense of His Own Usefulness") as a logical continuation of the theme that a worker can influence his job by the ideas and attitudes he brings to the work place. Charles Walker and Robert Guest are the authors of MAN ON THE ASSEMBLY LINE in the lesson.

### Answers to Discussion Questions

PAGE 1. "How does this man view his job?" SUGGESTED ANSWER: Positively, in terms of cleanliness, not dirt. He sees his job as playing an important role in the success of an organization with which he identifies and in which he takes pride. He is an excellent example of the power of positive thinking. "How does the organization he works for make him feel about his role?" SUGGESTED ANSWER: Respectable and useful. TVA defines his job as respectable -- note that he was given a place in the program -- and useful -- he knows how his job makes a contribution (cleanliness) to the goal (inexpensive electrical power and flood control) of TVA.

PAGE 2, top, (1) SUGGESTED ANSWER: Money; he obviously doesn't get much additional satisfaction from his job. (2) SUGGESTED ANSWER: His aspiration and occupational goal seems to be making money. He is not really interested in his work. He is unconcerned about the relation of his work to that of others. His work isn't important to him and doesn't have much meaning to him. (3) SUGGESTED ANSWER: Will vary, but most students will probably say no. (4) SUGGESTED ANSWER: Probably is representative of the attitude of many. Whether it is the attitude of the majority of most workers, we don't know, but our guess -- based on studies that have been made by sociologists -- is that this worker's attitude is prevalent. (You might ask the students to support their opinion in this question with specific examples or data: e.g., what their dad may have said about the workers in his plant, etc. (5) SUGGESTED ANSWER: See answers to questions (1) and (2) above. The nature of assembly-line work -- minute repetitive tasks -- is also not as conducive to positive feelings and attitudes toward one's job. Pride in workmanship is not very common among assembly-line workers. It is found more often among craftsmen, professional, technical, and managerial workers.

PAGE 2, bottom. (1) SUGGESTED ANSWER: Will vary, but could include job rotation, enlarging the scope of each job, and allowing individual more control over the pace of the job. (2) SUGGESTED ANSWER: Managerial, professional, technical, service workers, craftsmen, farmers, some clerical, and some sales.

### Extra Discussion Questions

"What ideas and attitudes do you believe can make a job important and satisfying to you?" SUGGESTED ANSWER: Will vary depending on what the individual expects to get from his job. See lesson #10, 23, 26, 29, 33, 36, 39.

### Background Reading

Anderson, DIMENSIONS OF WORK, 1964, chapter 7, pp. 8-10.
Goodman, GROWING UP ABSURD, 1960, chapters 1, 2, 7, and 8.
CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967, pp. 2-14 and 18-21.
Gardner, SELF-RENEWAL, 1965.

## #39 "A Sure Sense of His Own Usefulness"

This is a psychology of work lesson that provides data and commentary on job satisfaction. The idea that a job can be a source of personal satisfaction is one of the major themes of the course and this lesson helps reinforce the theme. The lesson can also be used to suggest to your students that in planning a career they should take account of the psychological climate of a job, e.g., the higher the skill required by the job the more satisfaction you are likely to get from it.

Suggested Answers to Discussion Questions. PAGE TWO, 1-- Professional and technical. 2-- Yes, it would seem to. Note that professionals are the most satisfied with their jobs. 3-- Yes, they probably worry more about their performance on the job. 4-- Will vary, but could include ideas that skilled and unskilled workers are not given as much status for performing their jobs, don't have much control over their work, are getting their satisfaction from sources other than their jobs, and are not as involved in their jobs as professional workers. 5-- Yes, the higher the level of skilled required the better the worker judges his performance. PAGE 3-- Answers will vary.

Extra Discussion Questions

1. "What are some of the reasons why people work?" (A review question covering some earlier lessons as well.) SUGGESTED ANSWERS: To earn money, have something to do and think about, form friendships or associations with people, provide a chance to be creative or express oneself, provide goods and/or services for others and thus make a positive contribution to society, add to one's self respect through meaningful work, and create opportunities to gain recognition.
2. "What conclusions would you draw from Table I?" SUGGESTED ANSWERS: The greater the involvement of a man in controlling his job, the greater the satisfactions he gets from it, but the more work problems he also has. There is a clear relationship between occupational status and the perception of one's ability on the job. For example, 13% of the professional and technician group view their performance as just average or not very good, compared to 38% of the unskilled workers who so view their performance. Even a highly competent unskilled laborer in judging his ability to do his work, may be affected by an underlying feeling of inadequacy springing from the generally low status of the job.

Background Readings

Anderson, DIMENSIONS OF WORK, 1964, chapter 7, pp. 8-10.
CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967, pp. 2-12, and 18-21.
Goodman, GROWING UP ABSURD, 1960, chapters 1, 2, 7, and 8.
Gardner, SELF-RENEWAL, 1965.

## #40 They Get the Work Done in American Industry

This very important lesson summarizes what we have said about the current employment scene using a somewhat different type of graphical presentation. Charts I and II show the occupational and industrial sources of jobs in rank order with the greatest source of employment at the top of the charts. You will want to make sure that this format is understood by your students. Chart III presents some data on employment of workers, in major occupational groups for the eight nonagricultural industries.

You will want to draw attention to the 11-fold division of occupations used in Chart I. There are two differences between this 11-fold division of occupations and the nine-fold divisions we used before. First, private household workers are shown as a separate group from other service workers. Second, farm workers are shown as two separate occupational categories instead of only one.

### Answers to Discussion Questions

I-1. About 8 million.
I-2. There are four groups: Semiskilled; Skilled; Professional and technical; Owners, managers, and officials.
I-3. Clerical; Private household; and Service.
I-4. Nearly 5 million.
I-5. True. Skilled workers are a single occupational category including about 9 million workers; whereas service workers are 2 categories -- "Service workers, except private household" and "Private household workers" -- totaling nearly 10 million workers.

Below Chart II. 1. True. 2. False. 3. False.

III-1. Finance, insurance, and real estate; Government; and Trade.

III-2. Government; Trade; and Service and miscellaneous.

III-3. Construction; Mining; Manufacturing; and Transportation and public utilities.

III-4. SUGGESTED ANSWER: Yes, opportunities for service workers are better in some industries than in others. Blue-collar employment is much more prevalent in nonagriculture goods-producing than service-producing industries. The best employment opportunities for blue collar occupations will probably be in the goods-producing industries. White-collar employment is greater in the service-producing than the goods-producing industries. Service-producing industries will probably be the best sources for those seeking white-collar employment. Service workers are most prominent in the service industries where the largest number of employment opportunities are located.

Extra Discussion Questions

Using the data in Chart I, please give the correct answer.

1. "More operatives were employed in 1964 than any other occupational group." True__X__ False____.

2. "There were more blue-collar than white-collar workers employed in 1964." True____ False__X__.

3. "There were about 4½ million workers employed on the farm in 1964." True__X__ False____.

4. "In 1964, there were no occupational groups in which there were more women than men employed." True____ False__X__.

5. "About how many blue-collar ("manual") workers were employed in 1964?" SUGGESTED ANSWER: 25 million. (Semiskilled + Skilled + Unskilled).

Using the data contained in Chart II, please give the correct answer.

1. "Manufacturing jobs in 1964 accounted for more employment than agriculture and mining combined." True__X__ False____.

2. "Manufacturing employment accounted for 50% of the total employment in the United States in 1964." True____ False__X__.

3. "In 1964, in what four industries were there five million or more workers employed?" SUGGESTED ANSWER: Manufacturing; Trade; Government; and Service and miscellaneous.

4. "About how many workers were employed in the goods-producing industries in 1964?" SUGGESTED ANSWER: 25 million. (Manufacturing + Agriculture + Construction + Mining).

Using the data in Chart III, please give the correct answer.

1. "White-collar workers are in the majority in every one of the nine industrial groups." True____ False__X__.

2. "There are some Service Workers employed in every industrial group." True__X__ False____.

3. "There are more blue-collar workers in certain industries than there are white-collar workers." True__X__ False____.

Other appropriate extra discussion questions are also available on page 3 of TM #34.

Background Reading

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 10-13, p. 15.

U. S. President & U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT 1967, pp. 211-212, p. 248, and p. 274.

## #41 "... But Woman's Work Is Never Done"

This lesson should be helpful to the students in gaining an appreciation of the importance of "womanpower" for our economy. The lesson shows that women are important human resources doing much of our work. The working role of a woman in our society is changing and this development will affect our personal, social, and economic lives. This lesson has obvious significance for the career planning of the girls, but also be sure to emphasize the implications and importance of the information in this lesson for the boys in your classes. The complete quote in the lesson title is: "Man may work from sun to sun, but woman's work is never done." Anonymous.

### Answers to Discussion Questions

PAGE 1. SUGGESTED ANSWER: Using the figure of $5,700 a year, and multiplying it by the number of families with a housewife present (40 million, according to the STATISTICAL ABSTRACT), we arrive at a figure of $228 billion which is equal to about one-third of our GNP. So GNP would be about one-third greater if we include the services of housewives in our national income accounts. We do NOT include the economic value of this homemaking work as part of GNP at the present time.

PAGE 2. T-1, ANSWER: Clerical workers, Private-household workers, and Service workers (except private-household). T-2, True; T-3, True; T-4, SUGGESTED ANSWER: Shows that relative to men, the number of women employed in professional and technical jobs declined between 1950 and 1965. Hints that this situation may be a wastage of human resources, for if 42% of the professional and technical jobs could be filled by women in 1950, there would appear to be no reason for assuming that women could not fill at least an equal proportion of these types of jobs today. (You may want to ask your students to speculate on the reasons for this decline in the percentage of the total number of professional and technical jobs held by women.) T-5, SUGGESTED ANSWER: All types. They are predominantly white-collar, Unskilled or Semi-skilled, and Service workers. T-6, Worse; for more details see U.S. Department of Labor, Women's Bureau, FACT SHEET ON THE RELATIVE POSITION OF WOMEN AND MEN WORKERS IN THE ECONOMY. T-7, 30%.

PAGE 3. Girls, SUGGESTED ANSWER: Will vary, but answers should suggest the prudence of preparing for a job and seeing themselves as more than just a worker or housewife -- most likely they will be both, even at the same time. Boys, SUGGESTED ANSWER: Will vary, but answers should suggest the possibility of considering a girlfriend or wife as a potential worker.

PAGE 4. SUGGESTED ANSWER: Item #1, Yes. (The event took place in Iowa on building an Interstate Highway, reported in the COLUMBUS CITIZEN-JOURNAL, October 17, 1967.) Item #2, Soviet Union. (Reported in the COLUMBUS-CITIZEN JOURNAL, October 19, 1967). Both items show that employment opportunities are open for women even in fields of work long dominated by men. Item #1 also suggests that government standards may influence the number of employment opportunities available to women. Both items suggest that ideas are changing concerning what constitutes "man's work" and "woman's work".

Extra Discussion Questions

1. "Should women receive the same pay as men for the same jobs?" SUGGESTED ANSWER: Will vary. Recent federal and state legislation, which specifies that under certain circumstances women must receive equal pay, suggests there are many who would say yes. For example, the Civil Rights Act of 1964 provides for equal employment opportunity for women, and more specifically the Equal Pay Act of 1963 prohibits wage discrimination based on sex. The Equal Pay Act, an amendment to the Fair Labor Standards Act of 1938, applies to all employees in firms engaged in interstate commerce and who are subject to a minimum wage under the Fair Labor Standards Act (sometimes called the "Wage and Hour Law"). (Covered employment includes workers in telephone, telegraph, transportation, construction, wholesale trade, manufacturing, and mining industries). Thirty states -- including Ohio -- have laws that prohibit discrimination in rate of pay because of sex. In general, these laws cover private employment in most occupations except agricultural laborers and domestic service workers.

2. "What is women's work?" SUGGESTED ANSWER: Nearly every type of work, because women really can do virtually any job in the economy. A recent news release from the Women's Bureau reports that women are working in each of the 479 individual occupations listed in the U. S. Census.

3. "For what reasons do women seek employment?" SUGGESTED ANSWER: A great variety of reasons; see U. S. Department of Labor, Women's Bureau, WHY WOMEN WORK, in your women workers materials.

4. "What portion of the nation's total output of goods and services is produced by women?" SUGGESTED ANSWER: Since women are approximately one-third of the employed work force, they produce about one-third of the output of GNP (plus the household work not counted in GNP calculations).

Table I. "Why are only 1% of all the women who are employed working as Craftsmen and foremen?" SUGGESTED ANSWER: Many reasons -- this type of work doesn't appeal to women; they haven't been trained to do it; discrimination; considered "dirty work" and not "women's work".

Background Reading

U. S. Department of Labor, Women's Bureau, 1965 HANDBOOK ON WOMEN WORKERS.

U. S. Department of Labor, Women's Bureau, COUNSELING GIRLS TOWARD NEW PERSPECTIVES, pp. 2-81.

U. S. Department of Labor, Women's Bureau, NEW APPROACHES TO COUNSELING GIRLS IN THE 1960's ..., pp. 2-50, 67-74.

U. S. Department of Labor, Women's Bureau, WOMEN WORKERS IN OHIO, 1960, (Rev.), 14 pp.

U. S. Department of Labor, Women's Bureau, UNDERUTILIZATION OF WOMEN WORKERS, October 1966, 25 pp.

## #42 Work and Mental Health

The purpose of this lesson is to introduce the idea of mental health and suggest some of the ways that work and mental health are related. We also are giving the students a chance to consider why good mental health is a desirable life goal and how this goal may be influenced by their role as a worker.

### Answers to Discussion Questions

PAGE 1. ** SUGGESTED ANSWER: Good mental health can be promoted by developing emotional maturity. A publication from the Menninger Foundation (an organization dedicated to the treatment and prevention of mental illness) defines emotional maturity as having the ability to deal constructively with reality, the capacity to adapt to change, to find more satisfaction in giving than receiving, to relate to other people in a consistent manner with mutual satisfaction and helpfulness, to love, and direct one's instinctive hostile energy into creative and constructive outlets. ** SUGGESTED ANSWER: Some of the job-related circumstances that frequently make for poor mental health include repetitiveness of the same task, close supervision, intensiveness on the job, and poor interpersonal relations with other workers.

PAGE 2. Top. ** SUGGESTED ANSWER: Conclusions which can be drawn from Table I include: Skilled workers have better mental health than semi-skilled workers. Workers on machine-paced and repetitive jobs have the poorest mental health. ** SUGGESTED ANSWER: No, at the higher skill levels, middle-aged workers have poorer mental health than their younger counterparts. At the lower skill level the younger workers have poorer mental health than middle-age workers. Bottom. ** SUGGESTED ANSWER: Some aspects of the job or work place which might make it difficult for a wkrker to get his needs satisfied include: Poor interpersonal relations with fellow workers, too much supervision and work pressure, repetitiveness. ** SUGGESTED ANSWER: Type of work which would cause them to have poor mental health will vary among the students. Ask them to explain why a particular job would disturb them.

PAGE 3. ** SUGGESTED ANSWER: Some of Harold's problems are failure to follow through with what he starts (accounting course, various schemes to get another job), blaming others for his problems (family and accountants in the office), and escapism -- not facing up to his problems (neglecting his studies, drinking). He might be able to solve these problems by studying harder and perhaps spending less time drinking beer and doing other things he likes to do off the job. ** SUGGESTED ANSWER: Frustration, despondency, risk of violent hostility because of undesired job transfers, lack of promotions, possible unemployment or lay-off, outmoding of skills, need for retraining or relocating, low wages, and poor working conditions. ** SUGGESTED ANSWER: Many communities have mental health clinics and mental health associations. Your State probably has a Department of Mental Hygiene, which can provide you with names of counseling agencies, and state mental hospitals which provide treatment. The telephone directory also lists local agencies, psychologists, and psychiatrists. A family doctor or clergyman could suggest sources of help.

### Background Reading

Anderson, DIMENSIONS OF WORK, chapter 7.

CFEE, Technical Paper #2, "Psychological Dimensions of Work", pp. 20-21.

## Lessons #43 - 52 -- Overview and Continuity

This unit is on the future of employment opportunities in the American economy. It also provides students with some educational, psychological, and sociological information and insights which should be helpful in thinking about and planning their participation in the manpower market and world of work.

The lessons in this unit are oriented toward the future and ought to help the students begin to examine themselves in some detail and ask what it is they want from employment. Students can feel personally involved, because the material in these lessons is aimed directly at them.

The unit begins with OCCUPATIONAL NEEDS IN THE 1970's, lesson #43, examining projected employment by occupations in 1975 and ends with lesson #52 (AN EXERCISE IN ECONOMIC REASONING: REVIEW LESSON), which involves the students in applying the five steps of economic reasoning to actual occupational planning and decision-making. Thus, the students are led through a series of lessons in which they look at future employment opportunities and themselves, and then are given an opportunity to apply what they have learned to their own occupational planning and decision-making.

Lesson #43 provides the students with a look at data on occupational projections for 1975.

Lesson #44 (WILL IT TAKE A GOOD EDUCATION TO GET TOMORROW'S JOBS?) then shows what is happening to the level of educational attainment of the labor force. The lesson makes use of supply and demand analysis and ties in with lessons #27 and #31.

Lesson #44 is valuable because of the educational information it contains and the help it provides in setting the stage for lessons #51 and #52 on occupational planning. Lesson #44 also provides a rationale for the two lessons on skills (#54, 55) in the next unit.

EMPLOYMENT BY INDUSTRY: PROJECTIONS FOR 1975, lesson #45, complements lesson #43 (employment projections by <u>occupation</u>) in treating the theme of future employment opportunities. The lesson looks at projected employment in 1975 by <u>industry</u>.

Lesson #46 (ASPIRATION AND ACHIEVEMENT) is a psychological lesson devoted to helping students think about themselves and how employment and work will fit into their scheme of life. This lesson emphasizes the ideas that goals are important and that achievement is not easily obtained, but is usually the result of persistent application of certain skills. The remaining six lessons in this unit are built on the foundation laid in #46.

"WHO AM I? WHAT AM I BECOMING?", lesson #47, is designed to help the students think about their personal identity. The emphasis in the lesson is on the vocational development of the individual. This is a key lesson in the occupational planning sequence. It ties in with the preceding lesson on aspiration and achievement and lesson #48 ("I'M A --PHYSICAL, SOCIAL, PSYCHOLOGICAL-- PERSON!") on the biological, psychological, and social factors that influence the development of the individual both on and off the job. This lesson should help students see that they are many-sided individuals influenced by their basic physical, psychological, and social nature.

THE FORMULA: ASPIRATIONS + ABILITY + ACTION = ACHIEVEMENT, lesson #49, is concerned with the personal and social facts that affect the type and amount of achievement we obtain. It suggests that achievement is not usually the result of luck. Rather, achievement is a combination of dynamic personal and/or social forces. This lesson has the same general achievement theme as lesson #46 and is tied to the identity theme of lessons #47 and #48. The achievement theme is also a logical lead-in to lesson #50 (HOUSEWIFE OR CAREER GIRL?) with its review of the changing aspirations of women in our society.

Lesson #50 provides some valuable information on the revolution that is taking place in women's lives. The lesson is designed especially to give the girls some information which may influence their occupational thinking and planning. Questions about the implications of this revolution in women's lives for men are also raised to give the boys something to think about. This lesson should be especially helpful for getting the girls more deeply involved in the course. Lesson #50 is also a logical continuation of the "identity" theme developed in the four preceding lessons.

FIRST THE PLAN, THEN THE JOB!, lesson #51, involves reading and responding to an excellent booklet on occupational planning and decision-making published by the U. S. Department of Labor. The booklet, CHOOSING YOUR OCCUPATION -- to be handed out in class to each student -- is used as a tool for guiding the student through some of the steps involved in occupational planning. (You will have to make provisions to obtain this publication from either your State Employment Service or the Bureau of Employment Security, U. S. Department of Labor, Washington, D. C.) Ideas about vocational planning and decision-making are introduced in the lesson and the students are invited to respond to these ideas.

Lesson #52 (AN EXERCISE IN ECONOMIC REASONING: REVIEW LESSON) is a review of lessons #25-51 with the added feature of being an exercise in economic reasoning. The lesson should prove valuable to the students as a practical exercise in using some of the information they have read and discussed in the course, within the framework of the five steps in economic reasoning. All the preceding lessons in the course provide raw material for #51 and #52.

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## #43 Occupational Needs in the 1970's

This is another extremely important lesson, giving the student a look at the occupational basis of employment in the 1970's. The lesson should be valuable to the student as he thinks about and makes decisions in his career planning.

You can use the employment projection data listed in Appendix I of this TM to answer any detailed question that students may have about the occupational outlook for employment in specific occupations. (This Appendix might also be a good bulletin board item.) You can use the data to illustrate the fact that within the broad categories of occupational groups -- for example, white-collar or professional and technical -- there is a great deal of difference in the rates of growth in employment. For a different approach to occupational projections, see Rosenberg, AUTOMATION, MANPOWER,AND EDUCATION, pp. 48-64.

Note that 1975 figures used in Table I are slightly different from the data on page 275 of the MANPOWER REPORT OF THE PRESIDENT 1967. BLS has changed its mind for the third or fourth time on the 1975 projections. In this lesson we will use their 1966 figures. The pyramid of employment (Page 1) occupational groups, percentage figures equal 100%.

The chart on page four visualizes the importance that the data in Table I have for future job opportunities of students. It is included in Today's Lesson in Brief to stimulate further thought and discussion by the students. In order to make maximum use of this chart, you will have to explain to the students how it is constructed and what it shows. The chart presents the BLS projected rates of growth in employment by occupational group for the period 1964-1975. The relative rates of growth have been classified into five categories: no change, less-than-average, average, more-than-average, and decline. (You will recall Table I showed that the average rate of change in employment for all occupational groups between 1964 and 1975 was 26%. We use 26% as the center point in the category termed "Average" in the Chart.) The chart shows for example, that three occupational groups -- Professional and technical workers, Service workers, and Clerical workers -- are projected to have a rate of growth in employment between 1964 and 1975 that is greater than the average for that period. In other words, between 1964-1975 these three occupational groups will show the greatest increase in employment. They will be good sources of job opportunities in the 1970's.

### Answers to Discussion Questions

Page 3. T-1a, False; T-1b, True; T-1c, True; T-1d, True; T-1e, True. T-2. SUGGESTED ANSWER: Farm workers: -21%, Nonfarm laborers: + 3% and operatives: + 15%. T-3. SUGGESTED ANSWER: Employment for white-collar and service workers will grow faster than the average during the period 1964-1975. By 1975 about 65% of all employed workers will be either

white-collar (50%) or service (15%). Blue-collar employment will grow in numbers between 1964-1975, but will be a smaller percentage of total employment by 1975. Farm workers will decline both in absolute number and as a percentage of total employment during the period 1964-1975. As measured by the relative increase in employment during the period 1964-1975, almost all of the white-collar and service occupations will offer good job opportunities early in the 1970's. Craftsmen occupations will offer below average job opportunities. Farm work will offer poor job opportunities. ("Good job opportunities" are measured in this question by the number of additional jobs available in 1975 when compared with the 1964 figure.)

Extra Discussion Questions

"For the period 1964-1975, rate the following jobs by whether they will provide relatively good, fair, or poor opportunities for employment. Use as the basis for your judgment the increase in employment you believe will take place during the period 1964-1975." Mark the blanks "G" for good, "F" for fair, "P" for poor. Farm workers P, Sales worker F, Business machine serviceman G, Draftsman G, Secretary G, Carpenter P, Housepainter G, Registered professional nurse G, Machine tool operator P, Accountants F. Suggested answer are based on Appendix I of this TM.

Background Reading

Bowen and Mangum (eds.), AUTOMATION AND ECONOMIC PROGRESS, pp. 65-66, 70-81.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 15-17.

## APPENDIX I

## A SAMPLER OF OCCUPATIONAL EMPLOYMENT OPPORTUNITIES, 1964-1975*

| | % Change | Rating |
|---|---|---|
| WHITE-COLLAR WORKERS: | 38 | Good |
| Professional and technical workers | 54 | Good |
| Accountants | 28 | Fair |
| Chemists | 67 | Good |
| Draftsmen | 44 | Good |
| Engineering and science technicians | 61 | Good |
| Engineers | 54 | Good |
| Registered professional nurses | 43 | Good |
| Teachers | 30 | Fair |
| Managers, officials, and owners | 23 | Fair |
| Clerical workers | 37 | Good |
| Bookkeeping workers | 27 | Fair |
| Office machine operators | 114 | Good |
| Stenographers, secretaries, and typists | 37 | Good |
| Sales workers | 30 | Fair |
| BLUE-COLLAR WORKERS: | 17 | Poor |
| Craftsman and foremen | 27 | Fair |
| Airplane mechanics | 21 | Fair |
| Automobile mechanics | 16 | Poor |
| Bakers | -10 | Poor |
| Business machine servicemen | 50 | Good |
| Carpenters | 5 | Poor |
| Cement and concrete finishers | 39 | Good |
| Compositors and typesetters | -14 | Poor |
| Electricians | 23 | Fair |
| Excavator, grader, and road machine operators | 43 | Good |
| Machinists | 4 | Poor |
| Painters | 77 | Good |
| Plumbers and pipe-fitters | 25 | Fair |
| Stationary engineers | 8 | Poor |
| TV and radio servicemen | 27 | Fair |
| Operatives | 15 | Poor |
| Assemblers | 9 | Poor |
| Inspectors | 14 | Poor |
| Machine tool operators | -4 | Poor |
| Laborers | 3 | Poor |
| SERVICE WORKERS | 35 | Good |
| FARM WORKERS | -21 | Poor |

*Based on the relative percentage change in employment anticipated for each occupational group or occupation between 1964-and 1975. The greater the increase in employment -- the "better" the rating. The ranges of the rating categories were determined by statistical classification techniques. The three categories and their ranges are "Poor": +17% or less change; "Fair": +18% to +35% change; "Good": +36% change or more. The average percentage change in employment for all occupations is +26%. CAUTION: The ratings are based on percentage change and do not take into account the size of the base. The number of additional jobs that will be created is not indicated.

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, America's Industrial and Occupational Manpower Requirements, 1964-1975, January 1, 1966, pp. 127-168.



M&EE:oael/rldpep/1968/08/TM#43

## #44 Will It Take A Good Education to Get Tomorrow's Jobs?

You may want to remind your students that the basic theme of this lesson -- the need for a good education in tomorrow's manpower market -- was also illustrated in lesson #23, "Are Today's Skills Good Enough for Tomorrow's Jobs?". This lesson is organized so that it can be read and discussed as an exercise in economic analysis. The title poses a question to which supply and demand analysis using actual data can be brought to bear to provide an answer. The data in this lesson should lead the students to two important conclusions: (1) Both supply and demand factors suggest that the answer to the question posed by the title is "Yes." (2) Dropping out of school before you graduate from high school is likely to seriously limit your chances for entering certain occupations.

In Table II, you should explain the procedure of ranking to show the importance of various items. The seeming mismatch between schooling and employment in Table II for service workers, is partially explained by the fact that the relatively low level of educational attainment of private household workers (8.9) brings the average level of education for all service workers down. All other service workers have an average of 11.3 years of schooling.

### Answers to Discussion Questions

I-1. SUGGESTED ANSWER: Yes, relative to our past and to other countries.
I-2. SUGGESTED ANSWER: Good.
I-3. SUGGESTED ANSWER: That six out of very ten workers in the labor force in 1975 will have completed a high school education or better. Competition, in terms of educational requirements, for jobs is likely to be keener in the future.
I-4. More popular. Note statistics of percentage of workers with college training -- 9.7% (1964) to 11.4% (1975); and 12.1% (1964) to 14.3% (1975).

II-1. SUGGESTED ANSWER: In general, yes.
II-2. SUGGESTED ANSWER: Employment in service industries is growing faster than goods-producing industries. Americans are spending more of their money on services thus creating more jobs for service workers.
II-3. SUGGESTED ANSWER: The total number of jobs that will be available during the period 1965-1975 or any one given year during the period. It also doesn't show the size of the labor force, i.e., the number of men and women available to fill the jobs. The number of new jobs available 1965-1975 is not distinguished from total number of people employed. This table illustrates that those occupations which will have the greatest amount of growth in employment during the period 1965-1975 are generally those where the workers are at least high school graduates. Table II does not show that "only the high school graduate will be able to get a job during the decade of 1965-1975".

III-1. SUGGESTED ANSWER: They have only one-third of the chance of being a white-collar worker as a high school graduate does. They also tend to be absent from occupations where the employment opportunities are growing fastest, i.e., professional, technical, managers, etc. and clerical.
III-2. SUGGESTED ANSWER: Will vary. Depends on what you mean by "economic suicide." You do limit your potential for getting certain types of employment when you drop out of school. Also you are twice as likely to be unemployed if you are a dropout rather than a high school graduate.

Extra Discussion Questions

1. (re Table III)-- "Why is the percentage of dropouts low among white-collar workers?" SUGGESTED ANSWER: High School diploma is often minimum credential expected by employers. Professional and technical jobs usually require even more education. See Table II.

2. "...technology has created a new relationship between man, his education, and his work, in which education is placed squarely between man and his work." Comment. (From G. Venn, MAN, EDUCATION, AND WORK, 1964, p. 1.) SUGGESTED ANSWER: Relate to lessons 23, 44, et al.

3. "The average person of high intelligence devotes the first 25 years of his life to training and the next 40 years to producing. This means nearly 40% of a man's life is spent in preparation for work. What does this imply?" SUGGESTED ANSWER: Education and training take an increasingly large share of people's life, and is an important determinant of work success.

Background Reading

Gardner, SELF-RENEWAL, 1965.

Chamber of Commerce of the United States, EDUCATION, AN INVESTMENT IN PEOPLE, 1964, pp. 20-23.

Committee for Economic Development, RAISING LOW-INCOME THROUGH IMPROVED EDUCATION, September 1965, pp. 16-20.

Venn, MAN, EDUCATION, AND WORK, 1964, pp. 1-29.

Mangum (ed.), THE MANPOWER REVOLUTION, 1966, pp. 241-245 and 249-250.

Rosenberg, AUTOMATION, MANPOWER, AND EDUCATION, 1966, chapter 9, pp. 40-41, 155-156, and 160-165.

Bowen & Mangum (eds.), AUTOMATION AND ECONOMIC PROGRESS, 1966, pp. 17-21 and 65-66.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 15-16.

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, 1965, pp. 17-18 and 35-42.

U. S. President and U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT 1967, pp. 159-161.

## #45 Employment by Industry: Projections for 1975

This lesson should help students begin to develop an understanding of which industries will offer the best job opportunities in the 1970's. The lesson will be valuable to the student as he thinks about and makes decisions in his career planning.

Information is provided in Appendix I of this TM to illustrate the fact that within the broad categories of industrial groups (e.g., manufacturing) there are vast differences in rates of employment growth. You also can use the data in Appendix I to answer detailed questions that students may have about the employment opportunities in specific industries. This Appendix will make a good bulletin board item.

"Good job opportunities" in this lesson means a better than average percentage increase in employment for the period 1964-1975. Table I does not indicate the number of additional jobs that will be provided between 1964 and 1975. Note that there is an error in the original table in Bowen and Mangum's AUTOMATION AND ECONOMIC PROGRESS, p. 64, which served as basis for Table I in today's lesson. Totals shown at the top of the table leave agriculture out; and the minus sign before the percent change in agriculture and mining is left out. Table I cannot be compared to Table E-9 on p. 274 of THE MANPOWER REPORT OF THE PRESIDENT 1967 since agriculture is listed separately in Table E-9's percentage distribution and percentage change columns. Note: A refinement in Table I you may want to mention to your students is that "Agriculture" includes self-employed and unpaid family workers in addition to wage and salary workers.

### Answers to Discussion Questions

PAGE 2 and 3.

T-1a, False; T-1b, True; T-1c, False; T-1d, True; T-1e, True.
T-2, Manufacturing, Trade, and Government.

PAGE 4.

C-1, Mining and Agriculture. C-2, Government, Services, Contract Construction. C-3, SUGGESTED ANSWER: The demand for the goods or services produced by these industries will not increase at the same rate. (Remember, the demand for labor is a derived demand.) Thus, the number of additional workers needed will not be the same for all goods-producing or service-producing industries. Some of these industries are much more subject to having mechanization or automation replace workers than are others, and some industries are much more labor-intensive than others.

Extra Discussion Questions

1. Table 1. "Approximately what percentage of all workers will be employed in 1975 in the service-producing industries?" SUGGESTED ANSWER: About 65%. (Transportation and public utilities + Trade + Finance, insurance, and real estate + Service and miscellaneous + Government.)

2. "What conclusions about the industrial sources of job opportunities in the 1970's do you draw from the data in Table I?" SUGGESTED ANSWER: Service-producing industries will offer more job opportunities than will goods-producing industries. For details, see summary in today's lesson.

3. "What are some of the reasons why people choose to work in one industry rather than another?" SUGGESTED ANSWER: The glamour and publicity surrounding certain industries like aviation and television. A parent, friend, or relative has a satisfactory working experience in an industry. A local labor market may be dominated by a single industry that provides abundant job opportunities.

Background Reading

Bowen and Mangum (eds.), AUTOMATION AND ECONOMIC PROGRESS, pp. 63-64 and 66-70.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 13-15.

APPENDIX I

## A SAMPLER OF INDUSTRIAL EMPLOYMENT OPPORTUNITIES 1964-1975

| | % Change | Rating* |
|---|---|---|
| AGRICULTURE | -21% | Poor |
| MINING | - 2% | Poor |
| CONTRACT CONSTRUCTION | +37% | GOOD |
| MANUFACTURING: | (+14% | Fair) |
| Durable goods | (+17 | Fair) |
| Ordnance and accessories | + 1 | Poor |
| Lumber and wood products | - 9 | Poor |
| Furniture and fixtures | +26 | Fair |
| Stone, clay, and glass products | +10 | Fair |
| Primary metal industries | + 5 | Poor |
| Fabricated metal products | +23 | Fair |
| Machinery, except electrical | +28 | Fair |
| Electrical equipment and supplies | +29 | GOOD |
| Motor vehicles and equipment | + 6 | Poor |
| Aircraft and parts | - 5 | Poor |
| Instruments and related products | +38 | GOOD |
| Miscellaneous manufacturing | +19 | Fair |
| Nondurable goods | ( 11% | Fair) |
| Food and related products | - 5 | Poor |
| Tobacco manufacturers | -20 | Poor |
| Textile mill products | - 1 | Poor |
| Apparel and related products | +17 | Fair |
| Paper and allied products | +24 | Fair |
| Printing and publishing | +16 | Fair |
| Chemical and allied products | +28 | Fair |
| Petroleum refining and related industries | -13 | Poor |
| Rubber and miscellaneous plastics | +34 | GOOD |
| Leather and leather products | + 1 | Poor |
| TRANSPORTATION AND PUBLIC UTILITIES: | (+12% | Fair) |
| Railroad transportation | + 8 | Poor |
| Local and suburban transit | - 1 | Poor |
| Motor freight transportation | +30 | GOOD |
| Air transportation | +41 | GOOD |
| Communication | + 3 | Poor |
| Electric, gas, and sanitary services | + 1 | Poor |
| WHOLESALE AND RETAIL TRADE | +33% | GOOD |

| | % Change | Rating* |
|---|---|---|
| FINANCE, INSURANCE, AND REAL ESTATE: | (+26% | Fair) |
| Banking | +44 | GOOD |
| Insurance | +12 | Fair |
| Real estate | +16 | Fair |
| SERVICE AND MISCELLANEOUS: | (+43% | GOOD) |
| Hotels and motels | +28 | Fair |
| Miscellaneous business services | +84 | GOOD |
| Automobile repair services | +30 | GOOD |
| Miscellaneous repairs | +40 | GOOD |
| Medical and health services | +52 | GOOD |
| Educational services | +54 | GOOD |
| GOVERNMENT: | (+54% | GOOD) |
| Federal government | + 8 | Poor |
| State government | +69 | GOOD |

*Ratings are based on the percentage change in employment anticipated for each industrial group or industry between 1964 and 1975. The greater the increase in employment -- the "better" the rating. The three categories and their ranges are: "Poor", +9% or less change; "Fair", +10% to +28% change; "Good", +29% change or more. CAUTION: The ratings are based on percentage change and do not take into account the size of the base. The number of additional jobs that will be created is not indicated.

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, America's Industrial and Occupational Manpower Requirements, 1964-75, January 1, 1966, pp. 9-124.



M&EE:oael/rldpep/1968/09/TM#45

# #46 Aspiration and Achievement

This lesson should encourage students to think about their life goals and serve as a vehicle for some serious reflection and self-analysis. Discussion in the classroom should be free-wheeling and provide students with stimulating ideas to think about. Because some of the questions tend to be very personal and many students might be reluctant to discuss their ideas in class, you may want to spend some class time in having students write out some of their answers for their own use.

## Answers to Discussion Questions

PAGE 2, top: "What are some of the factors that influence the goals we set?" SUGGESTED ANSWER: Cultural heritage, health and physical well-being, education, and hobbies. Question: "How might these factors change as you have more education and experience?" SUGGESTED ANSWER: Some factors will become more important and some less. New factors, such as job success, will begin to influence your goals. Answers to questions numbered 1-5 are personal, and intended to provoke thought, not be answered aloud in class. Bottom: "What hopes and aspirations might you fulfill through a job?" The students' answers will vary. PAGE 3, top: "Can you give some examples of how this might be done?" SUGGESTED ANSWER: Job Corps training, MDTA training (learning job skills), Neighborhood Youth Corps enrollment (part-time work experience), and joining such organization as Girl Scouts, YMCA, etc. Bottom: "Where does aspiration fit in?" SUGGESTED ANSWER: Answers will vary, but point can be made that aspiration (setting goals) can inspire not only new ideas but also hard work.

## Extra Discussion Questions (Answers will vary.)

1. "What personal qualities do you think the individual has to have to accomplish his goals?"
2. "What goals and dreams do you want to pursue?"
3. "Pick a well-known person who has achieved success in his field and tell the class why you think he has been so successful."
4. "Which of the following people do you think achieved the most in his life? Why? Jesus Christ, George Washington, Franklin D. Roosevelt, Adolph Hitler, Jackie Kennedy, Willie Mays."

## Background Reading


Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 163-174.

Anderson, DIMENSIONS OF WORK, pp. 29-31, 35-36, 81-85, and 144-147.

Gardner, SELF-RENEWAL.

Goodman, GROWING UP ABSURD.

CFEE, "Psychological Dimensions of Work", Technical Paper #2, pp. 14-17.


M&EE:oael/rldpep/1968/N10,D1xx/TM#46

## #47 "Who Am I? What Am I Becoming?"

This lesson should get the students involved in thinking about the questions posed by today's title. Try to get each student started on his own self-analysis. Perhaps having the students write out in detail for their own private use some of their answers to the questions would be one way of encouraging introspection. Some of you may want to use lesson #48 before lesson #47. After you read both lessons, it will be apparent that their order can be reversed.

### Answers to Discussion Questions

PAGE 1. "What has influenced who you are today?" SUGGESTED ANSWER: School, friends, neighbors, social class of family, organizations (Boy Scouts, Girl Scouts, etc.), and community. ##"... what factors, in addition to the above, may influence 'who you are' in the future as you become an adult." SUGGESTED ANSWER: Community you live in; neighbors; social, fraternal, and professional organizations; wife or husband; and children. ##"... things you are striving to accomplish while you are still in your teens?" SUGGESTED ANSWER: Learning skills which will help me get a job. Finding out more about who I am and what I want from life. Trying to figure out what type of occupation I want to work at when I graduate from school. Improving my personal appearance. PAGE 3. The five questions at the top of the page have no "correct" answers. They are designed to help the student begin to think about his role in the manpower market in terms of who he is and what he wants from life.

### Extra Discussion Questions

1. "Describe the type of person you would like to become." SUGGESTED ANSWER: Will vary, but their answers should stress the "positive" attributes they hope to develop. You may want to follow this question with one that asks how the students are planning to go about becoming the type of person they want to be. 2. "What opportunities and barriers do you see to becoming the type of person you would like to be?" SUGGESTED ANSWER: Opportunities: Education and training, development of personal skills, and multitude of opportunities for meaningful work in our society. Barriers: Lack of skills and/or education and training and need to develop personal skills. 3. "What are some of the factors that make it difficult for a person to be an individual in our society?" SUGGESTED ANSWER: Mass communications, large organizations that demand some uniformity in the behavior of their employees, seeking social status by conforming to norms of a particular social class, lack of understanding of what individualism really is.

### Background Reading

Isaacson, CAREER INFORMATION IN COUNSELING AND TESTING, chapters 2 and 5, pp. 144-174.
CFEE, "Psychological Dimensions of Work", Technical Paper #2, pp. 4-5 & 11-14.
Gardner, SELF-RENEWAL, chapters 9, 10, and 11.
Goodman, GROWING UP ABSURD, chapters 1-4, 7 and 8, pp. 3-16.

## #48 "I'm a --Physical, Social, Psychological-- Person!"

This lesson should assist the student in his quest for knowledge about himself. Self-appraisal is half the task involved in career planning and decision-making. (The other half is evaluating the manpower market.) The lesson helps the student to see that he brings to the manpower market a bundle of personal characteristics. The three sides of man's nature and the developmental nature of the individual are discussed in this lesson. The lesson should help students begin to understand how important it is to be able to analyze their various personal characteristics in terms of an occupation, and also to be able to think of themselves and their needs in terms of their total being -- to be able to put Humpty Dumpty together again.

### Answers to Discussion Questions

PAGE 1. SUGGESTED ANSWER: Will vary, but should indicate that student understands what are some of his physical, social, and psychological characteristics.

PAGE 2. SUGGESTED ANSWER: No correct answers. As the students identify some of the problems that they face in their current stage of development, you may want to point out that in solving these problems they will be developing themselves.

PAGE 3. SUGGESTED ANSWER: Will vary. In order to reinforce the idea that individuals are not identical in their needs and make-up, you might ask the students why their list of conditions on the job may be different from that of the other students.

### Extra Discussion Questions

1. "Can you think of some examples of how a worker's individual characteristics might (and should) influence his selection of a job?" SUGGESTED EXAMPLES: A man with a puny body will probably not become a professional athlete. A woman with a puny mind for numbers will not become a mathematician. A young man who does not like to be in close contact physically (or to communicate) with other people will not choose to be a retail sales clerk. A woman who likes to be with people will not become a fire watcher in a fire tower in a national forest.

2. "What specific occupations do you think might best meet your physical, social, and psychological characteristics? Why?" Or, "What specific jobs are not appropriate for your physical, social, and psychological make-up? Why?" SUGGESTED ANSWER: Questions or activities in #2 and #3 do not have correct answers. However, the answers that the students give should show that they can apply the information and analysis in this lesson to their own situation.

3. "Make a list of some of your physical, social, and psychological characteristics. Or, write a short paper on the topic "Who Am I?" in which you note some of your physical, social, and psychological characteristics."

4. "Do you think that the declaration to 'know thyself' is good advice for thinking about a career? Why? or Why not?" SUGGESTED ANSWER: Yes, because knowing yourself is half the evaluation necessary for career planning. You have to know what you want from life before you can seek it in an occupation.

Background Reading

CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967.

Goodman, GROWING UP ABSURD, chapters 2, 3, and pp. 3-16.

Anderson, DIMENSIONS OF WORK, chapters 1-7, and 11.

## #49 The Formula: Aspirations + Ability + Action = Achievement

The purpose of this lesson is to encourage the student to think about how he will achieve his goals in life. Attention is given both to some personal and social factors that affect our achievement. This lesson doesn't provide a great deal of detailed information on how to be successful in achieving your goals but does suggest some of the factors that are involved in achievement.

### Answers to Discussion Questions

PAGE 2. SUGGESTED ANSWER: Dr. Ward's aspiration was to continue to work as a surgeon despite his handicap. His determination and courage, coupled with manual dexterity and mechanical ingenuity, enabled him to make a mechanical apparatus which replaced the actions of his useless muscles. He continued to perform difficult and delicate operations. PAGE 3. Top. #1, SUGGESTED ANSWER: Achievement. You might ask the students what evidence they have to support their answers. #2, SUGGESTED ANSWER: On the basis of educational qualifications and work experience, seniority (some collective bargaining agreements), wealth and/or status (governmental ambassador posts), "pull" or "corrections" (political appointments), examinations (civil service jobs), and family ties (some apprenticeship programs and family businesses). #3, SUGGESTED ANSWER: Family attitudes, cultural opportunities, racial discrimination, interests, health, peer pressure, and record of past success and failure (success breeds success; failure encourages failure). Middle, SUGGESTED ANSWER: It is possible -- though exceedingly difficult -- to go from "rags to riches". (Example: David Sarnoff, President of Radio Corporation of America). SUGGESTED ANSWER: Ability and hard work will not guarantee success for all Americans. We have many different forms of discrimination, e.g., race, religion, sex, ethnic, which are barriers to the able and hard working. Luck may also play a part in whether you are successful. SUGGESTED ANSWER: Opportunities are not free and equal to all. We have discrimination in the U. S. based on money, social status, race, etc. which deny people opportunities for education and jobs.

### Extra Discussion Questions

1. "What are some of the personal factors that you think help people achieve their goals?" SUGGESTED ANSWER: Ability, pleasing personality, and perseverance.
2. "How do you think people react to "road blocks" or barriers to their achievement?" SUGGESTED ANSWER: Some people put forth more effort to overcome them, while others may give up ("You can't win; why fight it?").

### Background Reading

Isaacson, CAREER INFORMATION IN COUNSELING & TEACHING, chapter 5 and 6.

Anderson, DIMENSIONS OF WORK, chapter 6 and 7.

Goodman, GROWING UP ABSURD, chapter 2, 3, 8, 9, and 10.

Gardner, SELF-RENEWAL.

## #50 Housewife or Career Girl?

Today's Lesson should be especially helpful to the girls in your classes as they think about and plan their future. Be sure to emphasize what the "findings" of this lesson mean to the boys. This is not a lesson for girls only. The lesson could be assigned for outside reading and the class period devoted to discussing some of the questions.

### Answers to Discussion Questions

PAGE 2.

1. SUGGESTED ANSWER: A great deal more freedom than she had in the past, though perhaps still not quite as much as young men have. Answers will vary on how much freedom one should have. You may want to see if your class has a "double standard" -- favoring more freedom for men than for women.

2. SUGGESTED ANSWER: Because of the rapid change in the demand for specific job skills, a girl with broader training in basic skills is likely to find it easier to re-enter the job market.

3. SUGGESTED ANSWER: Because these are the types of jobs where opportunities for employment will be greatest in the future.

4. SUGGESTED ANSWER: Men will have to learn to live with women whose lives will be very different from past generations. They will have to be aware that the way their father organized the family's life and the role their mother had may be inappropriate and inadequate for their "modern" wives. Men will get some help in "bringing home the bacon" and this extra income will probably involve personal, social, and economic costs.

5. SUGGESTED ANSWER: Personal: The husband plays a different role. He may not be the "lord and master" of the house. The wife may think because she brings home part of the income, she should have a larger voice in family financial decisions. The husband may have to perform certain tasks around the house traditionally identified as "woman's work". Social roles may become confused as the wife does more "masculine" things and the husband finds himself doing "woman's work". Our society is suspicious of working mothers, often suggesting that they should be at home caring for their children. This creates guilt feelings in many working mothers. A working woman, single or married, in general has more freedom than her counterpart. Economic: A higher standard of living is possible because there are two incomes instead of one. There is more buying of "services" because the woman is not around the house to perform them.

PAGE 4.

1. SUGGESTED ANSWER: Decisions take place at each selection of a school, college or other educational programs; at each entry or departure from the labor market, whether by preference or because of lay off, unemployment, or forced retirement; at marriage, and subsequent changes in marital status; and at motherhood and at each major change in responsibilities as a mother.

2. SUGGESTED ANSWER: The need for more income (Ann in Case #1 and Mary in Case #2). To keep the skills they have learned (Mary and Ruth in Case #3). To find a productive outlet for their time and energy (Mary). For further information, see "Why Women Work", U. S. Department of Labor, Women's Bureau, in your women workers packet of materials.

3. SUGGESTED ANSWER: The emotional stresses occasioned by the limits which wage earning imposes upon women by affecting their day-to-day behavior and traditional roles. The special physical and moral hazards which paid jobs impose upon women. (Hazards from night work and long hours. The dual or triple strains caused by having women hold jobs while also being mothers and homemakers.) The temporary or interim aspects of many women's employment which affect both their working skills and their employability. The lower bargaining power of women, which definitely affects their economic status. Wage discrimination against women. Discrimination which women face by reason of male attitudes in the labor force and in professional groups. There are also certain problems which relate specifically to the care of the home, the husband and children.

4. SUGGESTED ANSWER: The costs may take the form of greater psychological and sociological stresses and strains in the family because the wife and mother is not playing the role other members of the family and society expect her to play. There are economic costs to having a married woman work: baby sitters, clothes, transportation, more dining out, and having more services performed by paid help.

Extra Discussion Questions

1. "Most girls expect to marry and to withdraw from the manpower market at the time when they would usually be making the greatest advancement in their jobs." Comment. SUGGESTED ANSWER: True; in marriage, as in all other things, "there is no free lunch." There is an opportunity cost involved in withdrawing from the labor force.

2. "The emotional stress of deciding the question of career versus marriage appears to be chiefly a conflict for the middle class woman who has gone to college and has achieved some of the satisfactions of working in an interesting profession or job." (M. Elliott, SOCIAL DISORGANIZATION, 4th Edition, p. 229.) Why? SUGGESTED ANSWER: Because a career has become an alternative to marriage in satisfying some of a woman's needs.

Background Reading

U. S. Department of Labor, Women's Bureau, COUNSELING GIRLS TOWARD NEW PERSPECTIVES, 1966, pp. 2-37 and 53-72.

U. S. Department of Labor, Women's Bureau, NEW APPROACHES TO COUNSELING GIRLS IN THE 1960's, 1966, pp. 1-50.

U. S. Department of Labor, Women's Bureau, FUTURE JOBS FOR HIGH SCHOOL GIRLS, Rev. 1965, 67 pp.

U. S. Department of Labor, Women's Bureau, JOB TRAINING SUGGESTIONS FOR WOMEN AND GIRLS, 1965, 10 pp.

## #51 First the Plan, Then the Job!

The purpose of this lesson is to help the student think about some of his concerns in planning a career. The lesson is exploratory and is not intended to provide the student with an actual career choice. (Junior and senior high school students should think in terms of a range of career opportunities rather than specific occupations or jobs.)

In this lesson, as in others, the terms occupation, career, and vocation are used interchangeably for variety in word usage and because many people do use them as synonyms. You may want to point out to your students, however, that these three terms are not perfectly synonymous. A career represents a pattern of jobs held during a working lifetime. It may involve several different jobs and more than one occupation. Many workers don't have a career because there is no sense of purpose in the work they are doing. A particular job or occupation may or may not represent a vocation.

The booklet CHOOSING YOUR OCCUPATION could be passed out to the student the day before this lesson is discussed. The title of Robert Frost's poem is "The Road Not Taken". Lesson #53 discusses more thoroughly the State Employment Service and other sources of help in finding a job which are only briefly mentioned on page 2. The "margin of error" theme on page 1 can also be illustrated by using unemployment data. You could explain to your students that higher unemployment rates for younger workers show that they are having difficulty in getting and keeping jobs. In fact, they have misjudged their opportunities in the manpower market. Unemployment figures (Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, pp. 32-35 and U. S. President and U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT, 1967, p. 215) show that the unemployment rate of 16 to 19 year olds have been double, and even triple, the average for all workers during the past two decades.

Answers to Discussion Questions

PAGE 2, top: "The future course of your life will depend in large measure upon the wisdom of your vocational choice." Comment. SUGGESTED ANSWER: Especially for boys, there is a great deal of truth in this statement. This question is meant to reinforce the idea that choosing an occupation is serious business. You might want to point out what some of the influences that career choice will have on an individual. For example, the status, self-esteem or self-confidence, creativeness, income, power, ideas, thoughts, opinions, values, and behavior of an individual is affected by his occupation. "A job is not just work and pay; what it will lead to 10 years from now is what counts." Comment. SUGGESTED ANSWER: This question should help suggest to the students that long-range planning is necessary in occupational decision-making. You should look at a job in terms of opportunities, not merely what you do now and how much you get paid. Middle, "... write down some ideas about how you can find out which occupation is right for you." SUGGESTED ANSWER: I could get a part-time job in an occupation in which I am interested and try it out. I could talk to workers who are already employed in certain occupations. Reading pamphlets and books on occupations could help me identify the type of work I might be interested in. By introspection I could attempt to find out what are my basic attitudes and values. Then I could try to identify jobs which would be consistent with these attitudes and values. "Vocational planning is more than finding a job. It is discover-

ing yourself. The important goal in occupational planning is not merely to learn to market oneself but also to discover oneself." Do you agree with this statement or disagree? SUGGESTED ANSWER: Students might find a great number of noneconomic factors to consider in occupational planning. It also should make the students aware of the fact that occupational planning is not a one-shot affair but rather should be continuous. "The individual's decision on an occupation is generally limited to those occupations about which he knows something, which are appropriate to his class position and sex status, and which are not barred by ethnic discrimination or by limits of physical or mental ability and money." What is your reaction to this statement? SUGGESTED ANSWER: According to sociologists, this is a true statement. The point of this question is to suggest to the students that there are limitations in choosing an occupation. They often can't be employed in every occupation they might think desireable for one reason or another. Occupational planning and decision-making involves knowing your limitations as well as your assets. You could ask the students to give examples of people who might have a serious handicap in certain occupations. Examples: Man with weak, puny body becoming a professional wrestler; woman with weak puny intellect becoming a mathematician; man with weak puny bank balance becoming a financier.

PAGE 3. "... think about how you personally will benefit and how the nation can gain from your occupational planning." Comment. SUGGESTED ANSWER: Occupational planning will increase your chances of finding a job that is "right" for you. There are three very important benefits which accrue to you and the nation as a result of your finding the right job: greater earnings for the individual, greater output of goods and services for the nation, and greater personal satisfaction for the individual.

Extra Discussion Questions

1. You might want to ask your students to respond (true or false) to the following statements about occupations:

There is only one best occupation for any one individual.
Highly intelligent students do not need any help or guidance in choosing or preparing for a job career.
The choice facing girls today is that of a marriage versus a career.
Once you make a choice of a job you should stick with it for the rest of your life.
In America, you can have any job you want.

SUGGESTED ANSWER: False for each of the statements. Guidance experts consider these ideas fallacies.

2. "What do you think is necessary for an occupation to be a vocation?" SUGGESTED ANSWER: No correct answer. The students might mention: interesting and rewarding work, good and/or pleasant fellow workers, an occupation that helps humanity, and occupation which uses the maximum of my talents and abilities.

3. "Do you think young people are doing a good job of career planning?" SUGGESTED ANSWER: One recent study, which reported that nearly three out of every four high school boys change their career plans within a year after graduation, suggests that job career planning is still in its infancy in the United States.

Background Reading

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, chapter 2, pp. 11, 14, and 15.

Anderson, DIMENSIONS OF WORK, pp. 32-38.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 3-9.

Goodman, GROWING UP ABSURD.

Gardner, SELF-RENEWAL.

U. S. Department of Labor, Women's Bureau, NEW APPROACHES TO COUNSELING GIRLS IN THE 1960's, 1966, pp. 2-50, 66-67, and 70-74.

CFEE, Technical Paper #2, "Psychological Dimensions of Work", pp. 12-13.

## #52 An Exercise in Economic Reasoning: Review Lesson

This lesson serves two purposes: It is a review of material presented in lessons #25-51. It also provides the student with a practical exercise in economic reasoning. We believe this can be one of the most valuable lessons in the course since it so intimately involves the student in thinking about himself and his role in the manpower market and world of work. Since this lesson is personal in nature, and designed to encourage the students to write out their answers, you may choose to devote much of your class period to letting the students write their answers to the questions. One method would be to have the students write out all their answers outside of class, except those involving the five step questions (1-d, 2-d, 3-f, 4-e,5).Then most of the class period could be a "laboratory" period in which the student would answer the questions for each of the five steps. You could make yourself available to the students to give them help in understanding what is involved in answering the questions. Unless you have reason to do it differently, you should encourage your students to use their lesson as a worksheet.

You may want to review the five steps in economic reasoning in class before starting on this lesson in order to provide concrete illustrations of the process of economic reasoning. You could give some examples of the types of questions and concerns that the students want to consider in using the five steps for career planning. For example, a student in your class might reason as follows: (You may want to read this hypothetical example aloud to the class) "Define the PROBLEM. My problem is that I have to make decisions now about the school curriculum and subjects that I will be taking next year. The curriculum that I follow in school and the subjects that I take should help prepare me for employment in an occupation that will be rewarding and satisfying to me. I must solve this problem in a way that will make it possible for me to achieve a meaningful life.

"Identify my GOALS (and underlying values). My goals are to have an interesting and rewarding life. To me the most interesting thing in life is nature. I enjoy watching and understanding and being a part of our changing natural world. I like to work with wood products, designing and building model ships and planes. I also like to plant and grow trees, flowers, and vegetables. I hope that I can find an occupation which will allow me to work out-of-doors in some job where I can build, create, shape, or grow things. The job that I want should be one in which I can earn enough money to provide my wife and family with a comfortable living. I don't have to make a lot of money in my job. I don't want a job which will take me away from my family for a long period of time. I want a job where I can work pretty much at my own speed and have a chance to follow a job through from start to finish. I want to be proud of the type work that I do.

"Consider my ALTERNATIVE METHODS. I think I am interested in a career as a forester, surveyor, or landscape gardener. These occupations might make it possible for me to obtain my goals in life. Foresters work both for private firms in the lumber and wood products industry and governmental agencies--especially the U. S. Forest Service. Surveyors also work for both private firms (mostly in the construction industry) and governmental agencies (state highway dept., etc.). Some surveyors are self-employed and sell their services

to the public. Landscape gardeners are employed both by private firms and governmental agencies in parks, forest preserves, etc. In the 1970's there will be jobs available in all three of these areas but I think the opportunities will probably be greatest in landscaping work. I will also be easier, in the sense of being less time consuming and expensive, for me to learn the skills needed to be a good landscape gardener -- I can learn many specific skills on the job. However, if I decided to be a forester I should go to college. I could learn the skills to be a surveyor by combining some post-high school education (Junior College, technical institute) with on-the-job training. My high school course of study would be somewhat different in preparing for each of the three different occupations: Forester, college preparatory; Surveyor, college preparatory and vocational education; Landscape Gardener, vocational and general education.

"Study the probable CONSEQUENCES. As a forester I could make "good money" working for a timber or wood products company. If I worked for the government as a forester, I probably wouldn't be making as much as I would with a private firm. Much of forestry work is out-of-doors and I could be involved in planting and growing trees. One trouble with being a forester is that you might have to be away from your family from time to time. Foresters don't get much recognition from the public for their work they do. It would cost me a lot of money to go to college for four years to learn to be a forester. On the other hand, this investment in my education would more than pay for itself in the long run. Surveyors are paid pretty well. (The OCCUPATIONAL OUTLOOK HANDBOOK indicates that they get over $100 a week), and they do much of their work out-of-doors. Surveying is also very important work in the whole process of building. Builders and contractors depend upon a surveyor to do a good job. However, surveyors sometimes have to do jobs away from their hometowns and are separated from their families for periods of time. Unless you are self-employed, people hardly ever know which surveying jobs you did. I would have to go to school some more after high school to be a surveyor. Landscape gardeners are usually not as well paid as either forester or surveyors. They do spend most of their time in good weather working out-of-doors. Their work is often creative since it involves planting, growing, building, etc. Landscape gardeners very frequently get to follow a job through from start to finish. These workers usually work in their hometowns or nearby and have time to be with their families. They also get some public recognition for the job they do. There will be plenty of job openings in the 1970's for people who are trained in landscaping. (In fact, there will be some excellent opportunities for me to go into the landscaping business for myself in the 1970's. This would probably require that I continue my formal education in college, perhaps working for a degree in landscape architecture.

"I CHOOSE to prepare myself to be a landscape gardener. This tentative career choice is consistant with my life goals. I will take general and vocational courses in school that will help me develop the skills I need to be a good landscaper. I am going to try to develop better work habits around the house and toward my school work. I'll try to get a part-time job doing work related to landscape gardening. For now, I will continue my own "landscaping" work (lawn mowing, flower and vegetable planting in our garden) around our house."

Answers to Discussion Questions

1-a, SUGGESTED ANSWER: To help produce goods and services for our society. To earn income so the worker can maintain a high standard of living. To make it possible for the worker to meet his personal needs such as recognition, approval, self-expression, creativity, mastery, dominance, and independence. 1-b, SUGGESTED ANSWER: My education and training and attitudes and values. The overall growth rate of the economy and the needs of individual employers for specific types of workers with certain skills. The amount and type of competition that I face from other members of the labor force. 1-c, SUGGESTED ANSWER: Greater earnings and personal satisfactions that come from career planning. To the extent that career planning makes it possible for me to obtain a job that is "right" for me, it may meet some of the following of my needs: self-expression, creativity, mastery, independence, recognition, and approval. 1-d, SUGGESTED ANSWER: Possible answers to this and questions 2-d, 3-f, 4-e, and 5 were illustrated in the section preceding "Answers to Discussion Questions" in this TM. 2-a, 2-b, 2-c, SUGGESTED ANSWERS: will vary but should show that the student is familiar with the materials in lessons designated in parentheses. 3-a, 3-b, 3-c, 3-d, SUGGESTED ANSWER: There will be many different answers but all of them should show that the student can use the information that is in the lessons. 3-e, SUGGESTED ANSWER: will vary. Since there isn't a great deal of detailed information in the lessons, mentioned in the parentheses, you may want to refer the student to the OCCUPATIONAL OUTLOOK HANDBOOK and other career information sources. "Education and training" refer to such curricula as vocational education, college preparatory, and work experience or "cooperative" programs in the high school and post-high school programs offered by technical institutes, apprenticeship, colleges, etc. Work experience includes such things as a part-time job at the school, helping around the house, doing school work. 4-a, SUGGESTED ANSWER: Income in the form of wages or salaries. Fringe benefits which help the worker achieve economic security. Higher standard of living. 4-b, SUGGESTED ANSWER: Recognition and approval, mastery and achievement, dominance, socio-economic status, self-expression, independence, dependence, creativity and challenge. For more answers and details, see lesson #29. 4-c, SUGGESTED ANSWER: Will vary, but should include such ideas as influences my standard of living, the satisfactions I get from life (lesson #29), my "success" or "failure" in life, and my whole style of life (for more detail on this point, see lesson #33-2). 4-d, SUGGESTED ANSWER: Competition will be great from both workers my own age and those a few years older. There will be greater numbers of both men and women in the labor force. There will be more women, especially middle-aged women, in the labor force of the future. In 1975, better than 60% of the members of the civilian labor force will have graduated from high school, and many will have post-high school training. This is a better-educated labor force than we have currently.

References: MD/OAEL Lessons #15 and #25-51..

## Lessons #53 - 66 -- Overview and Continuity

The 14 lessons in this unit primarily are a continuation of themes developed earlier in the course, especially in lessons #25-52. However, certain topics (personal values, unemployment, importance of skills and education) that were discussed only briefly earlier are given more detailed attention in this unit.

These lessons are built around three particular themes. Lessons #53-56 and #60 are concerned with skills and their importance in the manpower market and economy. Lessons #57-59 consider unemployment. Lessons #61-66 return to employment and the importance of education. You will note that all the lessons in this unit are related in one way or another to the manpower market.

Lesson #53 (HOW DO I FIND A JOB?) provides continuity with the preceding unit by raising a very practical question for consideration by students. The place of this lesson in the sequence of lessons -- following lessons #51 and #52 -- suggests that after the students have done some career planning, their next logical concern should be where can they get help in finding a job.

Lesson #53 supplies information on sources of help in finding employment. The State Employment Service is given special attention. A couple of case studies are used to illustrate the types of services available to young workers through the State Employment Service.

SKILLS FOR YOUR SKILL BANK, lesson #54, describes some basic skills (communication, computation, manual dexterity, and group organization) which are useful in getting and keeping a job. This lesson also considers characteristics of valuable manpower skills, opportunities for developing skills in school, and applications of these skills. Lesson #54 builds on the concern that students should be developing about their own skills. Lessons #1, 23, 44, and the case studies in lesson #53 have already illustrated to the students the need to have skills in order to participate successfully in the manpower market.

Lesson #55 (HOW CAN I GET THE SKILLS NEEDED FOR TOMORROW'S JOBS?) describes some of the different education and training institutions and programs that are available to get the skills needed for tomorrow's jobs. The lesson emphasizes the wide diversity of educational and training opportunities available to young people. It also points out that often there are many different educational and training paths that can be taken to get the skills needed for a specific occupation.

Once the need for skills is established (lesson #1, 23, 44, 53), and skills are described (lesson #54), the next step is to find out how to get these skills, which is what lesson #55 explains. This sequence provides a logical lead-in to lesson #56 (EDUCATION: AN INVESTMENT IN HUMAN RESOURCES)

introducing the concepts of human capital and investment in human resources. Using the analogy between investment in nonhuman capital and human resources, the notion of "returns" and rates of return are discussed. This lesson emphasizes the idea that educational expenditures constitute an investment in human resources.

Lesson #57 (PORTRAIT OF THE UNEMPLOYED) provides a picture of some of the personal characteristics of unemployed workers. The purpose of this lesson is to give the students a sense of who are the unemployed. This lesson is related to the skills lessons (#53-56) in that it points out that many of the unemployed people are unskilled and having little education.

MEN AND WOMEN WITHOUT JOBS, lesson #58, provides another study of unemployment in our economy. This lesson examines the number of workers who are unemployed and the causes of their unemployment.

Lessons #57 and #58 describe unemployment and provide background for lesson #59 (HELP FOR THE UNEMPLOYED). This lesson describes some of the various public and private programs designed to help unemployed workers. Governmental programs such as unemployment insurance are briefly described as are the supplementary unemployment benefits and early pension programs of private industry. The job-creating potential of government fiscal policy is also discussed.

WORK: TEST SITE OF HUMAN RELATIONS, lesson #60, points out that work today is primarily a group activity. The increasingly social nature of work is illustrated by case studies. This lesson is designed to create in the students an awareness that successful participation in the manpower market requires a great deal of social awareness and the possession of group organization skills. The emphasis on skill in this lesson ties in with the previous skill lessons. The importance of social skills in getting and keeping a job is related to the concern about unemployment found in lessons #57, 58, 59.

Lesson #61 (WHERE THE JOBS ARE) provides the students with some information on the personal characteristics of mobile workers and the changing geography of employment opportunities in the United States. The fact that some states and geographical areas are enjoying a faster rate of employment growth than others is important to the students' career planning. This lesson is a return to the theme of participation in the manpower market found in earlier lessons (e.g., #34, 40, 43).

A CASE STUDY: WHERE THE JOBS ARE IN OHIO, lesson #62, examines employment trends in the states. Specifically it looks at occupational and industrial sources of jobs in Ohio for both 1950 and 1960, with employment projections for 1970 also given. This lesson is illustrative of the type of analysis that it is possible to make of the employment situation in any of our 50 states.

Lesson #63 (EMPLOYMENT -- FROM THE ROARING '20s TO THE SHIFTING '60s), provides a historical perspective on the revolution that has taken place in the occupational and industrial sources of employment in the United States. Lesson #63 is the last detailed lesson on employment and employment trends included in the course.

Lesson #64 (EDUCATION'S PAYOFF) is concerned with the estimated lifetime earnings of workers as they relate to education and occupation. Data on the rates of returns to the individual for his investment in his education and training are included. This lesson shows the financial rewards that go with successful participation in the manpower market and is a continuation of the earnings theme first introduced in lesson #28.

EDUCATION: ENGINE OF OUR NATION'S ECONOMIC GROWTH, lesson #65, shows the importance of education for the economic growth of the nation. The lesson emphasizes the aggregate economic benefits that accrue to the nation as a result of investment in education. It is a continuation of the concern with investment in human resources, showing the social "payoff" (as well as individual gain) resulting from investments in human capital.

Lesson #66 (WILL THERE BE ENOUGH JOBS FOR EVERYONE?) presents some elementary national income and employment theory. It also briefly discusses the idea suggested by Robert Theobald and others that because of the cybernation revolution our economy won't be able to produce enough jobs for everyone. The resulting "mass unemployment", according to Theobald, means that we must break the conventional linkage between employment and income. Social Security is shown to be a cushion for the unemployed in our economy. Lesson #66 is built around a concern for technological change discussed in lessons #21 and #22 and to which the lessons on unemployment (#57, 58, 59) are also related.

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## #53 How Do I Find a Job?

This lesson will help the student begin to develop an awareness of some of the possible sources of help in finding employment. More specifically, lesson #53 will be interesting and worthwhile to the student because it acquaints him with the services offered by the State Employment Services. You may want to ask a representative of your local State Employment Service office to come in and talk to your classes following this lesson. If you do so, ask the representative to talk on the kinds of services they provide workers and some of the problems they encounter in placing workers -- especially young workers. Since more than half of the material in this lesson consists of case studies, you may want to have the students read the lesson before class and spend class time discussing the answers.

### Answers to Discussion Questions

Page 2 -- 1, False (only about one-fifth); 2, 75%; 3, Clerical, sales, professional, and managerial.
Page 4 -- 1, SUGGESTED ANSWER: Interviewed her for placement. Discussed her interests, school and work experience, and occupational opportunities with OSES counselor in a planning session. Provided interest check-list inventory instrument. Supplied her with occupational and training information. Found a stop-gap job for the client. Tested her for skill proficiency and referred her to an employment opportunity resulting in full-time job.
Page 6 -- CS-1, False; CS-2, False; CS-3, False.

### Extra Discussion Questions

1. "Which of the various methods of obtaining employment that we have discussed will you probably use when you want to find a job? Why?" SUGGESTED ANSWER: Will vary, but the answers should show an understanding of the merits and demerits of the various methods.

2. "Since relatively few workers who find jobs every year are placed through the public employment agencies, why do you suppose education counselors and employment analysts recommend that young workers make use of these agencies when searching for a job?" SUGGESTED ANSWER: At the public employment agencies you get more than merely job placement services -- guidance and testing are available -- and get it free. Trained personnel are available at the Public Employment Service to help young workers.

### Background Reading

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 264-266.
Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, pp. 162-166.
U. S. Dept. of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 7-9.
W. Haber & D. Kruger, THE ROLE OF THE UNITED STATES EMPLOYMENT SERVICE, Feb., 1964, 122 pp. Available free of charge from the W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.

## #54 Skills for Your Skill Bank

We have referred to skills dozens of times in the course but until now have not given the subject any well-defined treatment. This lesson attempts to fill the void by identifying the four basic manpower skills -- Communications, Computation, Manual Dexterity, Group Organization -- and explaining why they are so important for workers of the 1970's and beyond. Their significance lies in the special characteristics they have: basic, useful, durable, versatile, transferable, open-ended.

Hopefully this lesson will help students develop a new perspective for their school work -- seeing their studies in a new light. Writing, spelling, book reports, grammar, etc., are not just "English" or "Language" but are facets of Communications skills that will have occupational implications. Doing well in school work can be seen as "adding to your personal skill bank".

Students should remember the four "CCMG Manpower Skills" and why they are important. We'll be referring to these skills and characteristics in future lessons.

References. The four CCMG skills are mentioned briefly on page 25 of the Committee for Economic Development statement, RAISING LOW INCOMES THROUGH IMPROVED EDUCATION (#p-1 of the Basic Library). Other ideas in this lesson come from a wide variety of sources; the present treatment is somewhat original. Rosenberg makes frequent references (e.g., p. 149) to educational needs in AUTOMATION, MANPOWER, AND EDUCATION(#13 in Basic Library). Also see Grant Venn, MAN, EDUCATION, AND WORK (#15 in Basic Library) pp. 18-29 and elsewhere. Venn's quote at the very end of the lesson is taken from his article "Learning Beyond the Classroom" in the AMERICAN VOCATIONAL JOURNAL (September 1967), pp. 14-16.

Questions. The question at the bottom of page 1 concerning the importance of manpower skills to the individual is rhetorical and is answered in the succeeding paragraph. On page 3, there is no correct answer to the first question, but it could be pointed out that communication and group organization are both extremely important because they have such broad application in a group-oriented, interdependent economy that is trending toward much greater emphasis on production of human services. Similarly, the highest rewards are likely to go the people whose communication and group organization skills are highly developed. Being able to manage and persuade people is a lucrative skill, as evidenced by the high earnings of advertising executives, top administrators, and many salesmen. On the other hand, don't underrate the earning power of persons having quantitative (compuational) skills in this growing era of the electronic computer.

In the case of Kitty Harrison, whichever answer the student gives should be explained and defended with specific reasons. A case for not recommending her employment could be based on her apparent lack of communication skills (she can't read the application form with understanding, she writes

badly, and is a slow reader; her personal appearance is slovenly (perhaps she lacks the manual dexterity to sew buttons on her jacket and trim her fingernails); her group organization skills are questionable in light of her comments to the interviewer about not liking people and her announced reluctance to "take orders from anybody"; her poor record in arithmetic hints that her computational skills may be lacking. Imagine the difficulty she would have trying to read technical instructions, assemble electronic equipment, work effectively with supervisors and other people.

SUGGESTED ANSWERS to questions on page 5:

1. Doing a good, conscientious job of studying and learning in school, especially English and Math. Participate in extra-curricular activities that will provide opportunities to gain experience in applying and improving basic skills: Communications (write for the school newspaper); Computation (help count votes in the class election, or record ticket sales for the school dance); Manual Dexterity (help build the stage sets for the class play); Group Organization (serve on a school committee and learn how to work effectively with a group of people).

2. In order to be able to work with people and communicate with them -- as well as supervising, managing, and persuading them -- you must be able to "get along" with people. If you pester or insult your fellow workers, or frighten them, make them feel angry, insecure, unhappy, then you will probably interfere with getting the job done smoothly and efficiently. If you are cheerful, helpful, pleasant -- the whole work group is likely to be happier and more productive. Many salesmen are successful in selling their product not because it is any better than a competitor's, but simply because customers like the salesmen as a person and want to be friendly and buy something from him.

3. Learning how to learn is an important skill. If a student does well in elementary school, this prepares him for junior and senior high school. A student who has developed good study habits, self-discipline, a good vocabulary, ability to write clearly and read rapidly with comprehension, take notes, answer questions in class discussion -- he is almost certain to succeed in post-high school training, whether in college or in a technical school or on the job.

4. Out-of-school activities that provide opportunities for "building your own skill bank" include part-time jobs (newspaper delivery, yard work), household chores, participation in organizations such as 4-H and Scouts. The point is that many opportunities exist all around us to acquire, develop, test, and improve our basic manpower skills. These activities can be viewed as a chance for self-improvement rather than viewed negatively as "drudgery and chores".

## #55 How Can I Get the Skills Needed for Tomorrow's Jobs?

This lesson will acquaint students with some educational and training programs available to help them learn the skills needed to get and hold tomorrow's jobs. The purpose of the lesson is not to provide detailed information but rather to illustrate that there are many different programs available for helping people acquire skills. Often several different programs are available to learn the same skills. Don't discourage students from asking specific detailed questions about training programs, even if you don't know the answer. We recognize that you probably won't have specific information immediately available for the students. However, you can refer the students to some of the following sources of information which should be helpful: school guidance counselor, the bibliography in this TM -- "Background Reading", your State Employment Service, local union business agent or officials (especially on apprenticeship opportunities), and personnel managers of local business firms (especially on OJT opportunities). This lesson would be a good one for the project's guidance counselors to teach. (Note: You might invite a young worker currently in apprenticeship training to talk to your classes and answer questions about his training.)

You may want to discuss some other educational and training programs we didn't mention in the lesson. For example: the Office of Economic Opportunity's Job Corps, Department of Labor's Neighborhood Youth Corps, correspondence schools, and home-study courses. Your students will probably not be able to answer the questions about vocational education and apprenticeship programs on pages 3 and 4 with their current information. One purpose of these questions is to acquaint the students with the sources of information about education and training opportunities. For further information on the sources see "Background Readings".

Vocational education programs in "skilled trades" involve training in those trades which have apprenticeship programs. The vocational training in the high school is pre-apprenticeship in nature and does not qualify a student automatically for entry into an apprenticeship program. Be careful when using the figures on the number of students enrolled in vocational education programs on page 2. These numbers refer to the students enrolled in vocational programs, not individual vocational courses. Students can take particular vocational courses without being in the programs.

### Answers to Questions

PAGE 2. 1-- False; 2-- 6%; 3-- high school; 4-- high schools, special schools, armed forces (38% + 19% + 11% = 68%); 5-- SUGGESTED ANSWER: Very few women seek employment in occupations where apprenticeship training is available. The reasons for this apparent lack of interest in apprenticeship occupations are: Many of these jobs are considered by society to be "man's work". Some of these jobs have physical hazards involved and are shunned by women for that reason. Many of these jobs don't have the pleasant surroundings which many women workers want. Discrimination against women is sometimes practiced by employers and labor unions.

PAGE 3. SUGGESTED ANSWER for all three questions: See your school guidance counselor, principal, or school guidance material.

PAGE 4. 1-- False; 2-- True; Middle of page -- "What types of apprenticeship training are available in your community?" SUGGESTED ANSWER: See your school guidance counselor or State Employment Service.

Extra Discussion Question: "The range of occupational choice you have depends to some extent on the level of skill you have as well as how much formal education and training you have received. Comment." SUGGESTED ANSWER: Will vary, but should suggest that the statement is true. For example, there are various types of jobs done by people called "engineers". Simply because a person has earned a college degree in civil engineering doesn't mean that he is immediately qualified to direct and supervise the construction of a major bridge across the Mississippi River. The skill level of a particular engineer may be limited to knowing how to build county roads.

Background Reading

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, pp. 143-158.

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, chapter 9, pp. 231-235.

Rosenberg, AUTOMATION, MANPOWER, AND EDUCATION, chapter 7.

Venn, MAN, EDUCATION, AND WORK, chapter 3 and 4, pp. 119-128.

U. S. President & U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT 1967, pp. 48-66, 159-161, and 277-280.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition.

U. S. Department of Labor, Bureau of Labor Standards, HANDBOOK FOR YOUNG WORKERS, 1965, pp. 21-23.

U. S. Department of Health, Education, and Welfare, EDUCATION FOR A CHANGING WORLD OF WORK, 1963, pp. 1-41. (Perhaps available in your local library.)

## #56 Education: An Investment in Human Resources

The purpose of this lesson is to introduce and explain the concepts of investment both in nonhuman capital and in human resources; "human capital"; returns or payoffs; rates of return on investment; and consider their theoretical and policy significance. The meanings of economic terms and concepts should be stressed. ("Words are the vehicles upon which ideas ride." Knowing the meaning of the words is the way to develop understanding of the ideas.) After completing the lesson, students should understand clearly the meaning and implications of the statement: "Investment in human resources can provide vast benefits to the economy as a whole and to individual workers".

References. Because the material included in this lesson is indeed at the "very frontiers of economic research" you won't find a great deal of information in standard references. THE ECONOMIC RETURNS TO EDUCATION by Innes, et al. (#12 in your Basic Library) will be your most valuable source. See p. 27 for rates of return reported on the third page of the lesson and p. 35 for Denison's findings on education as a source of economic growth. Also see RAISING LOW INCOMES THROUGH IMPROVED EDUCATION, especially pp. 15-21, 45, and elsewhere (#p-1 in Basic Library). McConnell discusses education as an investment in human capital in ECONOMICS, p. 383. The Chamber of Commerce chart book (#p-8 in Basic Library) is another source of data. References are made in this lesson to subjects introduced in a number of lessons that came earlier in the course: #7 (The Division of Labor and Economic Interdependence); #11 (GNP and Some Fundamentals of Economic Statistics); #17 ("The Business of America is Business"); and #28 ("What's In It For Me?"). Edward Denison's study of THE SOURCES OF ECONOMIC GROWTH IN THE UNITED STATES has become a standard reference.

Questions. At the top of page 2--SUGGESTED ANSWER: Yes, a 20% annual return on investment means that the entire investment would be repaid in the first five years. After that, "it's all gravy". Returns on savings deposits and on such financial investments as bonds are usually below 6% per year. Middle of page 2 -- SUGGESTED ANSWER: With a return of 25% a year, GM could replace its entire capital investment in just four years. (Data are from the FORTUNE Directory of 500 Largest Industrial Corporations, August issue of Fortune Magazine, 1967 and 1966.) Page 3 -- SUGGESTED ANSWER: Yes, acquiring more skills increases the knowledge and capability that can be used in further production. It is reasonable to expect that this additional skill, or "human capital", will increase your earning power in the future and therefore result in returns similar to payoffs from business investments in new machinery or equipment. Page 4 -- SUGGESTED ANSWER: Problems arise in determining who will pay for investment in human resources. For example, education in the schools is paid for through state and local taxes (and recently, some federal money). It is often hard to get voters to agree on raising taxes. There are always disagreements on how to distribute the tax burden. For nonhuman capital, an individual or business firm makes an estimate of probable payoffs -- knowing that it can appropriate or capture virtually all of these financial benefits -- and if the rate of return is high enough to justify the cost and risk, the investment is made. In the case of the Nail Company, "your parents" will have a claim to some of the profits resulting from the investment (and can always sell the shares of stock to somebody else), whereas the tax money is gone forever; and the benefits are spread among hundreds of thousands of school children. A particular taxpayer may or may not get "his share" of benefits, depending on how many children he has, how much they benefit from schooling, etc.

## #57 Portrait of the Unemployed

This lesson should help students develop an awareness of who the unemployed are. It puts a "face" on the unemployment statistics by identifying some of the chief characteristics of the "casualties of the manpower revolution". (Note the farmer and coal miner pictured on the left-hand side of the illustration on page 248 of MANPOWER & ECONOMIC EDUCATION. These are some of the "casualties"). Students should also note that many of the characteristics illustrated in this composite picture of the unemployed are the characteristics they themselves would have if they enter the manpower market before finishing high school.

You may want to discuss the nature of the characteristics of the unemployed in more detail than we have. For example, a person can improve his education and skills, but he can do little about his youth (except look and behave more maturely) and nothing about the color of his skin -- his race. It is important that the students see this difference in the amount of control the individual has over the particular characteristics which "select" him for unemployment.

See OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, p. 19 for another chart on unemployment rate by "skill levels" or occupations.

### Answers to Discussion Questions

PAGE 2. SUGGESTED ANSWER: Yes. Generally, the more schooling a worker has, the less likely he is to be unemployed. Workers with fewer years of education tend to be found in lower-skilled jobs. Unskilled and semi-skilled workers have a higher unemployment rate than other workers because they tend to be concentrated in jobs and industries where the level of employment fluctuates with changes in the overall level of economic activity. These workers also tend to bear the blunt of unemployment caused by technological change. It also is true that these workers, because of their lower educational attainment, are not as able to adjust to changes in the manpower market.

PAGE 3. Top. SUGGESTED ANSWER: Certain types of workers have unemployment rates twice as high as their counterparts: the unskilled, young, dropout, nonwhite, nonwhite female, young nonwhite female. Next -- SUGGESTED ANSWER: Yes. 25.4%. Nonwhite male workers 19 and younger have the highest unemployment rates of all male workers -- almost twice as high as their white counterparts. 14.2%. White male workers 19 and younger have the highest unemployment rate of all white workers. 13.6%. Female workers 19 and younger have an unemployment rate more than twice as high as all women workers as a group.

PAGE 3. Bottom. SUGGESTED ANSWER: Yes. Except for farmers, the higher the skill level generally the lower the unemployment rate. For example, "skilled" white-collar workers such as managers, officials, and owners

and professional and technical workers have very low unemployment rates. Less skilled white-collar workers (e.g., clerical workers) have an unemployment rate at least twice as high. Skilled blue-collar workers (craftsmen and foremen) have an unemployment rate less than half as high as unskilled laborers.

PAGE 4. Check marks (√) should be in front of the following: Young worker, dropout, negro worker, female negro worker, young female negro worker, unskilled blue-collar worker.

Extra Discussion Questions

1. "Using the data in this lesson, show that the unemployment rate for the unskilled, the young, the dropout, and the nonwhite is at least double that of their respective counterparts." SUGGESTED ANSWER: Using the data in table II, and assuming that our occupational categories do in fact reflect actual differences in skill levels of workers, you can show that unskilled workers have unemployment rates at least twice as high as their more skilled counterparts. Professional and technical workers had an average unemployment rate for the five years shown of 1.6%. This was only half the 3.1% rate that the less skilled clerical workers (also white-collar workers) had for the same five years. Unskilled blue-collar workers (laborers) had an average unemployment rate of 9.8% for the five years -- more than twice the unemployment rate (4.3%) for skilled blue-collar workers (craftsmen and foremen) for the same period.

Turning to Table I we find that young men and women workers (19 and younger) had an unemployment rate greater than double the average for their respective sexes (Male: 14.2% vs. 4.7%; Female: 13.6% vs. 5.8%).

Chart I illustrates the "double trouble" facing the dropout. It shows that workers 18 to 24 years old with one to three years of high school had an unemployment rate of 16% while those who had completed 4 years of high school had an unemployment rate of 8%.

Table I shows the "double trouble" of nonwhite workers. It indicates that the unemployment rate for nonwhite males (10.6%) is more than double that (4.7%) of their white counterparts. Nonwhite females had an unemployment rate of 11.3%, which is almost double the 5.8% rate of white females.

Though data is only given for one year in Chart I and Table I, the conclusions we have drawn from this data is applicable to the period since the mid-1950's. See MANPOWER REPORT OF THE PRESIDENT 1967, pp. 214-216 for further details.

2. "What are the implications of the data presented in this lesson for policies dealing with unemployment?" SUGGESTED ANSWER: We must have not only an aggregate policy for dealing with unemployment, but also policies tailored to meet the problems of the "disadvantaged" groups having unusually high unemployment rates.

3. Table I. "How would you explain the higher unemployment rates for the 'boxed' groups?" SUGGESTED ANSWER: The lack of skills and experience of these workers and the discrimination which exists among employers, labor unions, etc.

Background Reading

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, pp. 31-59.

Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, pp. 300-307.

C. Kalish, (U. S. Department of Labor, Bureau of Labor Statistics), A PORTRAIT OF THE UNEMPLOYED, Special Labor Force Report No. 61, 1966. (Free publication available from BLS).

## #58 Men and Women Without Jobs

This lesson should help students identify and understand some of the basic causes of unemployment. It also gives some data that can be used to measure and evaluate the overall dimensions of unemployment in our economy and the relative importance of some of the casual factors (seasonal changes, business cycle, etc.).

Frictional and short-term unemployment are not exactly the same thing. All frictional unemployment is short-term but not all short-term unemployment is frictional. For example, seasonal unemployment may be short-term. See Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, pp. 288-289. The methodology of the BLS estimate contained in Table I is not explained by Wolfbein. If you want to explain the nature and meaning of a business cycle in more detail, see McConnell, ECONOMICS, pp. 186 and 194-196.

### Answers to Questions

PAGE 1.1--SUGGESTED ANSWER: Yes. To illustrate the numbers of people involved in the unemployment figures, you could point out that total unemployment in the U. S. in 1960 was equal to the entire adult population (age 18-64) of Massachusetts and Oregon combined (3.9 million). In 1961, unemployment rose to 4.8 million -- a figure that exceeds the adult population of Indiana and Kansas combined. Imagine the seriousness of the problem in terms of having every adult of working age in the cities of Cleveland, Cincinnati, and Columbus jobless and unable to find employment. The number of unemployed workers (12.3 million) in 1933 at the depths of the Great Depression was equal to the entire adult population of Ohio, Michigan, Indiana, Illinois, and Wisconsin all put together. In 1933, before passage of the Social Security Act, being jobless meant no earnings, no unemployment compensation, no social security benefits for the aged. 2.--SUGGESTED ANSWER: During a depression, the demand (total spending) for goods and services is declining or reaches a low plateau. The demand for workers to produce these goods and services also falls. Thus, the unemployment rate goes up to new highs. During a war, the economy is operating at or near its capacity in order to meet the needs of both the military and the civilians. Thus, there is an increase in the demand for workers, forcing the unemployment rate down.

PAGE 3. T-1. SUGGESTED ANSWER: Some industries are more affected by seasonal factors and weather. For example, crops are not harvested in all parts of the country throughout the year; and in the North, construction activity declines in the winter. T-2. SUGGESTED ANSWER: Better planning by firms; governmental incentives to private business firms; development of new materials for use in winter construction; etc.

C-1. Yes. Unemployment rates are highest at low points of the cycle and lowest at the peaks of business expansion.

C-2. Note: low points of the business cycle correspond to high unemployment rates in Chart I. 1958, unemployment rate about 7.3%; in 1961, about 6.8%; in 1963 about 5.8%. (These figures are for mid-year, seasonally adjusted and will not agree with annual averages as reported in the Economic Report of the President.)

C-3. SUGGESTED ANSWER: The "manpower revolution" was so great in our economy during this period of time, and our response to it so small, that the result was an ever greater number of people unemployed when ever the economy had a downswing. The fundamental changes in the manpower market that were taking place, and still are, were obviously the types of disruptions that result in unemployment. During most of this time, neither private business nor government adequately created policies and programs which would either stimulate demand for workers or help workers develop the skills which would get them a job. The result was an unemployment problem which tended to snowball over time.

PAGE 5. "Explain the possible effects on employment of each of the examples above." SUGGESTED ANSWER: Students should be able to see the direct effects on employment. Some of your brighter ones might be able to point out the secondary employment effects. For example, the shift from steam locomotives to diesel engines brought about a decline in the demand for coal which in turn decreased the demand for coal miners. This technological change also eliminated the need for railroad firemen.

Extra Discussion Questions

1. "Identify the probable causes (frictional, seasonal, cyclical, structural) of the unemployment of each of the workers mentioned in the listing on page 2." SUGGESTED ANSWER: Coalminer -- structural; single woman -- structural; former owner -- structural or cyclical; electrical engineer -- structural or cyclical; negro -- frictional or structural; family man -- frictional.

2. "In what industries do you believe workers are most likely to be affected by cyclical unemployment?" Why? SUGGESTED ANSWER: Goods-producing industries rather than service industries. Durable goods industries more than non-durable goods industries. Industries producing capital equipment such as machine tool. These industries are more dependent on business investment expenditure for their sales. Business investment expenditure is more volatile because it depends upon the expectations of businessmen. These expectations can change drastically in a short period of time.

3. "Rank the following reasons, from most important to least important, as the immediate cause of unemployment among workers in the United States: Worker lost his previous job, reentering labor force after absence, new worker seeking first full time job, quit job." SUGGESTED ANSWER: These are already ranked from most important to least important. See MANPOWER REPORT OF THE PRESIDENT, 1967, pp. 124-126.

4. "Why is structural unemployment the most difficult type of unemployment to eliminate?" SUGGESTED ANSWER: It involves fundamental changes of large proportions which are not easily dealt with by the hodge-podge of policies and programs industry and government have currently devised.

5. "What are the causes of structural unemployment in the United States?" SUGGESTED ANSWER: Fundamental changes in the manpower market such as the numbers and kinds (sex and age) of workers in the labor force, shifts to service and white-collar employment, geographic shifts in industry, and technological change. For more details see Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, pp. 10-18.

6. "In view of the fact that there have been between 2 million and 5 million workers unemployed every year in the United States since the end of World War II, how can economists talk about the 'scarcity' of labor as an input resource or factor of production?" SUGGESTED ANSWER: You can talk about scarcity from a specific point of view such as scarcity of skilled labor, engineers, and scientists. In other words, scarcity may be present in abundance because unemployed workers don't have the requirements -- real or imagined -- to get the jobs that are available. Also labor and other resources may be scarce relative to "wants" but not relative to effective demand.

Background Reading

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, chapter 1.

Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, pp. 285-297.

McConnell, ECONOMICS, chapter 11.

## #59 Help for the Unemployed

The purpose of this lesson is to give students a general idea of some of the public and private programs that have been created to deal with the unemployment problem. The students should also begin to think about the strengths and weaknesses of these various programs.

You could discuss monetary policy as a "tool" for dealing with the unemployment problem. We left it out of our discussion because we felt that it would take too much time to provide the details needed to make it understood. If you would like to have a discussion on monetary policy, see Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, chapter 6 and McConnell, ECONOMICS, chapter 18.

You may want to point out that the economic policies and programs discussed in this lesson are not the only ones available to deal with the unemployment problem. A brief discussion of the distinction between "alleviative" and "curative" and economic and welfare policies and programs would give the students a better insight into unemployment "remedies". See Becker, PROGRAMS TO AID THE UNEMPLOYED IN THE 1960's, pp. 3-5.

The Area Redevelopment Act of 1961 has been superceded by the Public Works and Economic Development Act of 1965 which is administered by the Economic Development Agency, U. S. Dept. of Commerce. The program is basically the same -- only the name and the money have been changed. You may remember the old ARA, but now it is the EDA. You might use this change in law and agency designation in class as an example to illustrate the need for the students to keep abreast of changes in manpower programs.

### Answers to Discussion Questions

PAGE 2 (top). SUGGESTED ANSWER: Consumers may spend a smaller fraction of the additional income they have after a tax cut than they normally spend. Tax cuts or increased spending may not be big enough or quick enough to deal with a serious unemployment situation; timing is all important in fiscal policy. The aggregate approach to unemployment may not affect certain specific groups of unemployed workers. For example, the unskilled and the uneducated young negro worker may not be helped by a reduction in corporate income taxes.

PAGE 2 (bottom). SUGGESTED ANSWER: Will vary. It depends on the individual's particular situation. The answers should suggest that programs must be tailored to the individual, not vice versa. When you help an unemployed individual through any program you are helping solve the nation's unemployment problem.

PAGE 3. SUGGESTED ANSWER: Provides the unemployed worker with a "minimum standard of living" while he is looking for work. It also helps him from becoming so disillusioned that he will not look for work. UI helps to increase total demand, which promotes increased employment -- less unemployment.

PAGE 4. SUGGESTED ANSWER: Will vary. In general, the strength of these programs is that they are geared to the particular situation faced by the unemployed worker. The general weakness of the private programs for the unemployed worker is that they may not provide enough income. For the economy, a major weakness is that these programs may prevent desirable labor mobility. For more details see Becker, pp. 16-19.

Extra Discussion Questions

"Which of the policies and programs that we have discussed would be most helpful for dealing with negro unemployment? -- Youth unemployment? -- Frictional unemployment? -- Structural unemployment? -- Cyclical unemployment?" SUGGESTED ANSWERS: Will vary, but not all policies and programs are equally valuable as a solution for every type of unemployment problem. For example, fiscal policy, while especially helpful in dealing with cyclical unemployment, will not greatly influence frictional unemployment and may not appreciably affect the unemployment rate of negroes.

Background Reading

Becker, et al., PROGRAMS TO AID THE UNEMPLOYED IN THE 1960's, January, 1965.

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, chapters 5-12.

McConnell, ECONOMICS, chapters 11, 14, and 21.

## #60 Work: Test Site of Human Relations

The main purpose of this lesson is to illustrate the highly social nature of work in our modern economy and suggest that workers need social skills in order to successfully participate in the manpower market.

### Answers to Discussion Questions

PAGE 2. #1. SUGGESTED ANSWER: Will vary and there is no correct answer. Personality and character traits such as friendliness, honesty, truthfulness, sincerity, courtesy, responsibility, cooperativeness, and loyalty will probably be mentioned. Willingness to do your full share of work, or even more, also contributes to good relations on the job.
#2. SUGGESTED ANSWER: No, though there may be some differences in opinion among your students. To be the guide of your own destiny may have its "costs", e.g., unpopularity and the envy of others.
#3. SUGGESTED ANSWER: Some occupations in which social skills are very important are: Teacher, minister, lawyer, nurse, sales clerk, waitress, and social worker. Industries in which social skills are extremely important include: Retail trade, government, hotels and motels, insurance, real estate, banking, medical and health services, and business services. These social skills are essential for success in these occupations and industries because they all involve a great deal of interpersonal relations.

PAGE 2. Middle, Case #1. SUGGESTED ANSWER: Men and women may want to keep up their associations with people they have worked with even after they have retired. The social satisfactions we get from our job may be more important than the pay.

PAGE 3. SUGGESTED ANSWER: These two cases illustrate the positive social benefits that can accrue to workers from having good interpersonal relations on the job. The women in Case #1 had formed some of their closest interpersonal relationships while they were working. "Waiting at the Gate" was a way of continuing these satisfying relationships. In Case #2, the girls formed a work team in whih their need for interpersonal relations was partly fulfilled. The physical setting of the job wasn't really important to the girls as long as they could work together under their supervisor.

PAGE 4. SUGGESTED ANSWER: The girls were a friendly work team whose work was being studied by outside experts. Because the girls understood how important the experiment was to the psychologists, and the key part they themselves played, they tried to do their best no matter what the hours, pay, or working conditions. Over the five years of the experiment, the girls improved their output in their desire to please the psychologists and show how capable and cooperative they were.

### Extra Discussion Questions

"Why may a job help satisfy your need for interpersonal relations?" SUGGESTED ANSWER: You spend roughly one-third of your life on the job and often associate with a great number of people. Friendships develop and you may look forward to your daily work because you enjoy being with people you like.

Background Reading: *Anderson, DIMENSIONS OF WORK, 1964, chapters 1 and 2.
*Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 146-163.
*CFEE, "Psychological Dimensions of Work", Technical Paper #2.

## #61 Where the Jobs Are

This lesson should help students in their career planning by making them aware that workers who have greater mobility generally will have more employment opportunities. Students should be encouraged to think in terms of the trends or generalizations that are applicable to mobility and the geographic location of jobs. The specific data contained in the lesson are merely representative and should not be treated as "need to know" material.

### Answers to Discussion Questions

PAGE 2. I-1, False; I-2, False; I-3, True.

PAGE 2. "For Discussion", SUGGESTED ANSWER: Yes, there is a positive relationship between high mobility and more freedom in job choice. Freedom in an employment sense means, among other things, the ability as well as the willingness to move in order to take advantage of job opportunities. Mobility is a method of increasing the number of job opportunities you can explore. High mobility rates may also suggest -- restlessnees on the part of our population; a search by people for a "better way of life"; willingness of business firms to transfer many of their employees; lack of employment opportunities in certain geographical areas making out-migration necessary. Low mobility rates of some groups of workers may indicate a lack of employment opportunities.

PAGE 3. II-1. SUGGESTED ANSWER: Faster regional growth rates in employment are seen in the West ("Pacific", "Mountain", "West South Central") and South ("South Atlantic", "East South Central", "West South Central"). The lowest rates of growth in employment are the East ("New England", "Middle Atlantic") and North ("New England", "Middle Atlantic", "East North Central", and "West North Central"). States which are having the fastest employment growth are: Nevada, Arizona, Florida, New Mexico; and the big employment states of California and Texas are not far behind. Those states in which growth in employment is the slowest are: West Virginia, Rhode Island, Pennsylvania, and Maine. II-2. SUGGESTED ANSWER: How many jobs in total does Nevada have? What types of jobs are there? How many job opportunities requiring my skills are available? II-3. SUGGESTED ANSWER: -12% -- West Virginia is the only state to show an actual decline; a relatively poor place to get a job. 19% -- Ohio's job growth has been substantially less than the national average and a little below average for the Great Lakes Area. +80% -- Employment in the Mountain States has grown faster than in any other area in the U. S. (although the total number of jobs in the 8-state Mountain Region is still, for example, far below total employment in the 3-state Middle Atlantic Region). II-4. SUGGESTED ANSWER: Changes in the industrial composition of employment -- e.g., decline of coal mining in West Virginia and Pennsylvania and growth of the space industry (California) have caused differences in the growth of employment among the states. These changes in the geographic location of jobs are caused by technological change (diesel replacing steam engines and loss of jobs for

coal miners in Pennsylvania and West Virginia) and by industry search for lower costs (textile industry movement from New England to the South partly as a result of lower labor costs). Certain states also are more dependent than others upon particular industries providing employment for their workers: e.g., manufacturing and finance, insurance, and real estate in New York. As these industries grow or decline the employment situation in the state is greatly affected.

PAGE 4, Top. Other conclusions: Negro workers are not as mobile as white workers; job opportunities -- as measured by the additional numbers of workers employed -- are better in some states than in others; employment opportunities vary a great deal among states in the same geographic region, e.g., Florida +139% and West Virginia -12% in the South Atlantic region.

PAGE 4, Middle. 1. SUGGESTED ANSWER: "Frontiersmen" helped to open and settle the Northwest Territory and the Western Reserve (part of today's "Middle West") and the Southern Appalachian area in the late 1700's and early 1800's. Except for the American Indians, all our ancestors were immigrants in the beginning of this country. After the Civil War, the area West of the Mississippi River was settled. The search for economic opportunity was one of the basic forces behind the westward movement of our population.

2. SUGGESTED ANSWER: Will vary and there is no correct answer. In economic terms, labor mobility is desirable from both an individual's point of view (higher wages and more employment opportunities) and society's (maximum output and productivity). However, these economic rewards to both the individual and the nation have their "costs". (Remember: "There is no such thing as a free lunch.") Sociologists have noted that many mobile Americans have no sense of "community." They don't "belong" to the city where they reside. These "rootless" people are not likely to be active citizens; the quality of community life suffers. Psychologists use such terms as "alienation" and "loss of identity" to describe the personal outlook and feelings of many Americans. The psychologists believe that the despair, frustration, and lack of meaning that many Americans feel is partly the result of their high mobility.

Extra Discussion Questions

Referring to Table I.

1. "How would you explain the answer to question I-3 in the lesson?" SUGGESTED ANSWER: The existence of a national manpower market for professional and managerial workers encourages mobility of these workers. Because they earn higher salaries, they can afford to move. Also, many of these people work for organizations that pay some or all of their moving expenses.

2. "Would you be willing to move to get the type of job you want? Why?" SUGGESTED ANSWER: Will vary. No correct answer, but they should indicate an understanding of the personal and social advantages and disadvantages of mobility.

3. "Why are some people reluctant to move to get a new job or to perform their old job in a new place?" SUGGESTED ANSWER: They like living where they are. They are afraid of the unknown. They don't want to leave their friends and family relations.

4. "What else besides economic opportunity might motivate people to move?" SUGGESTED ANSWER: Health; for change of scenery; to be near children; and to be near better shopping and cultural attractions.

Referring to Table II

5. "Why did Ohio rank so poorly in adding jobs to its economy during the period 1947-1964?" SUGGESTED ANSWER: The industrial base of Ohio's economy has been heavy industry, with mining and agriculture also important. These are the very industries that have been lagging or actually declining in the U. S. during this period.

6. "How might the data in Table I and II affect your occupational planninb?" SUGGESTED ANSWER: I may have to be ready and willing to move in order to increase my employment opportunities. I should be prepared for further changes in the location of job opportunities in the future.

Background Reading

Wolfbein, EMPLOYMENT, UNEMPLOYMENT, AND PUBLIC POLICY, pp. 63-67.

Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, pp. 215-231.

## #62 A Case Study: Where the Jobs Are in Ohio

The purpose of this lesson is to help students develop an awareness of the occupational and industrial sources of jobs in their state. Students should find the lesson valuable for their career planning. The specific data in this lesson should not be regarded as "need to know" but only as a basis for discussing trends in employment in your state.

You probably will want to discuss the employment trends in your state and/or region with the students. Your State Employment Service or Chamber of Commerce should be able to provide you with some reports that have the data you need to make a presentation on employment trends. You also might consider having some of your better students take the materials you get and prepare a report for the class on employment trends in the community, region, or state.

### Answers to Discussion Questions

TI-1. A--True; B--True; C--True; D--False; E--False.
TI-2. Operatives; Craftsmen; and Clerical.
TI-3. In all three years the same answer -- there are more Clerical jobs in total than any other white-collar occupation.
TI-4. For the 1950-1960 period, Laborers and Operatives had the same low rate of increase -- 3.6%. For 1960-1970, Laborers have the lowest growth rate -- zero!

TII-1. A--True (absolute number of jobs in 1970); B--True; C--False; D--False.
TII-2. Contract construction; Wholesale and retail trade; and Finance, insurance, and real estate. (Also Public Schools, but not the "Government industry" in total.

Extra Discussion Question. 1. Referring to Table I. "Why are farm workers declining in numbers in Ohio and other states?" SUGGESTED ANSWER: Productivity is rapidly increasing in agriculture. Thus, it is possible to produce more output with fewer workers. The demand for farm products is not increasing as much as the demand for other products or for services.

### Background Reading

Ohio Bureau of Employment Services, Division of Research & Statistics, MANPOWER IN OHIO, 1960 to 1970, Rev. Ed., March 1963, pp. 28-41.

## #63 Employment -- From the Roaring '20s to the Shifting '60s

The purpose of this lesson is to give students a historical perspective on employment trends in our economy. This lesson should help the students develop a sense of the evolution of our economy. Data provided in the two tables will enable students to check relevant facts and draw their own conclusions about employment trends in our economy. The emphasis in this lesson is on identifying trends, not on mastering all the data that is provided.

You may want to explain the phrases Roaring '20s and Shifting '60s to your students. You will recall that optimistic business forecasters were predicting in the late 1950's and first years of the 1960's that this decade would be called the "Soaring Sixties." They were predicting a 3-4% increase in real GNP every year, rising national income, an increase in employment, and a sizeable drop in the unemployment rate. The record of our economy in the early 1960's suggests that shifting would be a more accurate adjective than soaring.

The reason why data on 1950 were not included in Table I is that with the exception of Mining (which was 1% less in 1950) and Contract Construction (which was 1% more in 1950), the 1940 distribution of employment was about the same as 1950.

### Answers to Discussion Questions

Page 2, TI-1, True; TI-2, True; TI-3, False; TI-4, SUGGESTED ANSWER: Service and miscellaneous(7% increase), Government (7% increase), and Trade (4% increase); TI-5, SUGGESTED ANSWER: The goods-producing industries have a smaller share of total jobs. The service-producing industries have increased their share of the total number of jobs.

Page 4, TII-1, False; TII-2, True; TII-3, White-collar; TII-4, SUGGESTED ANSWER: The growth of white-collar and service occupations and the decline of blue-collar and farm jobs; unskilled workers are declining in importance as a percentage of total employment; semiskilled and skilled workers have about the same relative importance in employment as they had in the past.

### Background Reading

Wolfbein, EMPLOYMENT AND UNEMPLOYMENT IN THE UNITED STATES, pp. 181-202.

U. S. Department of Labor, Bureau of Labor Statistics, OCCUPATIONAL OUTLOOK HANDBOOK, 1966-67 Edition, pp. 11-12, p. 15.

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 185-199.

U.S. President & U. S. Department of Labor, MANPOWER REPORT OF THE PRESIDENT 1967, pp. 211-212, p. 274.

## #64 Education's Payoff

Some of the ideas and data in this lesson are new and some are repeated from lesson #28 ("What's In It For Me?") and lesson #56 (Education: An Investment in Human Resources) for emphasis and reinforcement. The basic objective of all the lessons dealing with returns to education is to assure that students understand that people with more education generally have higher earnings, and education contributes to the growth of the economy as a whole. For reinforcement, we teach these understandings repeatedly and in a variety of ways.

Table I, as we explain to the students, is adapted from lesson #28. Starting from Miller's data, we computed the percentage figures in the column at the right. This facilitates comparisons of relative income. (Dollar differences were listed in #28.) Table II represents data selected from the Census report that is cited. The particular occupations were chosen on the basis of interest, and to show some variety of occupations and industries. As explained on page 4 of the lesson, we would be glad to provide data on women's earnings and earnings for men and women having different kinds (and quality) of training; but little is available. Presumably these types of data will be forthcoming in the next couple of years as research studies are carried out. Note: average lifetime earnings for all male workers, including all educational levels and all occupations is $229,000.

References. In addition to Miller's book, RICH MAN POOR MAN, cited on page 1 of the lesson, and the Census monograph cited in the tables, you can find useful and pertinent information in the CED statement, RAISING LOW INCOMES THROUGH IMPROVED EDUCATION (Basic Library item #p-1) and Innes et al., THE ECONOMIC RETURNS TO EDUCATION (BL item #12). Data on 1966 median family income of negroes and earnings by educational level are from SOCIAL AND ECONOMIC CONDITIONS OF NEGROES IN THE UNITED STATES (Bureau of Labor Statistics Report No. 332, October 1967) p. 14 and 21. Data on the cash value of technical training in North Carolina came from the U. S. Department of Labor, "Manpower/ Automation Research Notice", no date, Contract No. 81-32-11. The closing statement on page 4 concerning education as "a way out of poverty" for young people was inspired by Herman Miller, RICH MAN POOR MAN, pp. 148f. In the same paragraph, note that there are qualitative differences between jobs as well as income differences: personal satisfaction, social status, healthfulness, fringe and cultural benefits for the worker himself and his whole family.

Questions. I-1, False; I-2, False; I-3, Agree, although the $1,000 differential for a high school diploma is a bit exaggerated (rounded off from $760, which is $35,000 divided by 46 years). **II-1. Electronic Technician, who had to have some kind of technical training (in high school, or elsewhere) to qualify for such a high-paying job. II-2, yes. The most authoritative facts available on the subject of lifetime earnings are Miller's, as reported in Tables I and II. Page 4, negro college graduates have had lower incomes than white males with comparable education partly because of racial discrimination and partly because the quality of college education has not always been as high for negroes as for whites. Some negro colleges -- poorly-financed, poorly-staffed, with poorly-prepared students and low academic standards -- have turned out graduates with skills about on a par with some better high schools. In addition, for social reasons even apart from racial discrimination, the scope of the market for negro college graduates has not been as broad as for white college graduates (e.g. limited job opportunities for negro college professors in Western states; reluctance of negro executives to enter an all-white management staff).

## #65 Education: Engine of Our Nation's Economic Growth

This is another multi-purpose lesson designed to: reinforce information introduced in lesson #56 concerning the importance of education as a source of economic growth; review the seven major goals of the U. S. economy; and introduce a framework for analyzing the process of economic growth.

The goals were first discussed in lesson #16. If time permits, you might want to ask students to tell what they have learned in the course that contributes to a deeper understanding of what these goals really mean and why they are important. (We do virtually nothing with the seventh goal, International Balance, in this course.)

The paragraph following the list of goals refers to the OVERALL LEVEL of our nation's output and income. You might want to ask students to recall (lesson #3) the two other basic questions that every economic system must answer: It must determine the COMPOSITION of output and decide the DISTRIBUTION of the nation's income. (How Much to Produce, What to Produce, For Whom to Produce.)

In discussing the analytical framework for explaining growth -- as outlined on p. 2 of the lesson -- keep in mind that education contributes to improving the quality of manpower, advances in technology, and greater efficiency of management. Education is one very important engine of economic growth. It is not, however, the only source of growth.

References. In addition to lessons #56, 16, and 3, refer to McConnell, ECONOMICS, pp. 351-371, on American economic growth, especially the summary on p. 370. Innes et al., THE ECONOMIC RETURNS TO EDUCATION, pp. 33-38, summarize the findings of Edward Denison and T. W. Schultz on education as a source of economic growth. In the 1967 ECONOMIC REPORT OF THE PRESIDENT, the value of education is discussed on pp. 143-145. Data on recent performance of the economy are taken from ECONOMIC INDICATORS and p. 214 of the 1967 ECONOMIC REPORT OF THE PRESIDENT.

Questions. Page 2, #1--Students will probably say yes. Ask them to explain the basis for this judgment. Doubling the level of living within one person's lifetime (from 1909 to 1957 is 48 years) seems rather impressive, intuitively, especially if you contrast this with experience in the underdeveloped countries, where life for the mass of people continues at the subsistence level. **#2-- a) Gross National Product for the entire country, expressed in terms of prices that prevail during the year the GNP was produced; b) total GNP adjusted for changes in the general level of prices, i.e., the value of the dollar; c) GNP adjusted for price-level changes and also adjusted for changes in the size of the population. Page 3 -- $728 billion, which is 4% of $700 or $28 billion added to $700 (which assumes that we were operating at full potential last year). Page 4, #1--SUGGESTED ANSWER: The "fuel" for education as an engine of growth is the money we spend to support education, or more precisely, the resources we invest in education. If the American people are impressed with the returns from education, they might want to increase the investment that is made in education by increasing financial support of schools, developing additional programs of technical training, providing subsidies for college students, etc. **#2--SUGGESTED ANSWER: Better-informed citizens, more participation in community affairs, less crime, less social dependency (people on welfare), better appreciation of music and other fine arts, more people expressing themselves in terms of "becoming all that they are capable of being", happier people (???).

## #66 Will There Be Enough Jobs for Everyone?

Numerous references have been made throughout the course to the circular flow of economic activity, Gross National Product, level of employment, the goal of full production, functions of work, rates of unemployment, the Great Depression, the "cybernation revolution". Today's lesson attempts to tie these subjects together within the framework of national income and employment theory.

The basic educational objective of this lesson is to explain the analytical framework and general approach of the modern theory of aggregate employment. It is the "aggregate demand" theory, or as we describe it, the "total spending" theory. The total number of job opportunities in the economy is determined by the level of Total Spending for goods and services. (Why? Because the demand for labor is a derived demand -- derived from the demand for products.) Total Spending (which is actually GNP) is made up of spending for Consumption, spending for Investment, and spending by Government. If there isn't enough Total Spending, there will be unemployment because resources will not be employed to produce goods and services unless those goods and services can be sold in the market. On the other hand, if there is too much Total Spending, inflation will result. If Total Spending is at the proper level, there will be full employment without inflation.

Chart I is an adaptation of the simpler circular flow model introduced in lesson #6. We have added Business Investment and Government purchases of goods and services to the flows in the output market on the right-hand side and added the term "Enterprises" below "Firms" at the bottom of the diagram. In the original model, in effect there was only one component of aggregate demand (Total Spending), namely Consumption. Now, we have added the other two big components of GNP (namely, Business Investment and Government). We continue to ignore Foreigners (Net Exports).

References. It will be helpful to refer back to Lessons #6, 11, 16, 21, 58, and 59. See McConnell, ECONOMICS, pp. 185-250, for discussion of aggregative employment theory; note especially the summary on p. 207. Data on the economy's performance in 1967 come from ECONOMIC INDICATORS (monthly publication of the President's Council of Economic Advisers), Historical statistics come from the ECONOMIC REPORT OF THE PRESIDENT 1967, p. 236. The summary of THE TRIPLE REVOLUTION is our own, based on the original memorandum and personal conversations with Robert Theobald, one of the principal authors.

Questions. (page 3) **1--SUGGESTED ANSWER: Business can voluntarily increase its own Investment spending, and Consumers can increase their spending -- though this isn't likely to happen without some stimulus from government. As explained on pp. 1-2 of lesson #59, the federal government can reduce taxes on Consumers and Business to leave them with more money to spend; or Government can increase its own spending to raise the level of total demand in the market. **2--SUGGESTED ANSWER: Again, taxes and government spending can be adjusted (up or down) to attempt to regulate the

level of Total Spending in order to encourage just enough Consumption, Investment, and Government purchases of goods and services, but not to overstimulate ("overheat") the economy so much that inflation results. This is known as "Fiscal Policy". The Federal Reserve System can also help regulate Total Spending by adjusting the supply of money and credit. These actions are called "Monetary Policy". (See McConnell, ECONOMICS, pp. 265 and 339). **3--SUGGESTED ANSWER: There is no correct answer. If additional market demand (total spending) is required to promote full employment, a judgment must be made to stimulate one or all of the components of GNP. As a practical matter, tax cuts on Business do not always stimulate increased Investment right away; tax cuts for low-income Consumers generally will stimulate increased Consumption; increased purchases of goods and services by Government (federal, state, and local) add to market demand directly and immediately. The point to emphasize here is that there is no "right" answer that fits every situation. If Total Spending is too low, it should somehow be raised. How this is done is a matter requiring a selective judgment, based on the political and economic situation. **4--SUGGESTED ANSWER: No, there will always be some <u>frictional</u> unemployment (as well as seasonal and structural). An attempt to reduce unemployment to zero by continually raising the level of Total Spending would lead to <u>inflation</u> -- "too much money chasing too few goods and services".

The final question in the lesson, at the left of the abstract human figure on p. 4, can be answered in a variety of ways. It should be a good, open-ended discussion question. Certainly one can begin now to prepare for life in the 21st century (only 33 years away) by developing skills and attitudes that will permit continuous adjustment to a changing world. An attitude of personal development -- growing and changing as the social and economic world grows and changes -- will build a solid foundation for the future. Acquiring basic CCMG skills that can be transferred to new occupations and can be added-on-to by continuing education certainly would be a valuable investment in human development.

## Lessons #67 - 75 -- Overview and Continuity

This unit develops three themes suggested earlier in the course but not treated in detail until now. The first theme (lessons #67-70) is about the expectations of workers and employers as to what they hope to find and what they actually do find in the manpower market and world of work. Lessons #71 and #72 discuss the benefits, costs, and financing of education in the United States. The last group of lessons (#73-75) deals with decision-making and some of the concerns involved in making personal and social decisions in our rapidly changing world.

With the exception of the two lessons on education -- which provide some new information and summarize previous discussions of education -- this unit is structured around a humanistic concern about the worker. The lessons raise questions about what workers want from their jobs in particular and life in general. They explore what workers may find in the work place as they seek their goals. In the last three lessons, students are exposed to some tools and methods of approaching the opportunities and problems they will find in the manpower market and world of work. These tools can help the student build and shape his own future.

Lesson #67 (WHAT DO EMPLOYERS EXPECT FROM THEIR WORKERS?) gives the students a chance to gain an insight into what employers expect from their employees. Many of the lessons in the course have concentrated on what students can expect to gain from employment. But up to now, we haven't considered the demands that potential employers will make on them. This lesson answers the question of what personal qualities (including general skills, work habits, and attitudes) employers look for when hiring workers. Lesson #67 is related to lessons #28, 29, 34, 47 dealing with other concerns that should be examined in career planning. Since the lesson provides information on employer expectation, it is a logical lead-in to the question that lesson #68 next poses.

IS THERE REASON AND JUSTICE IN THE WORK PLACE?, lesson #68, suggests through the use of case studies that reason and justice do not always prevail in the manpower market. The students are also given an opportunity to see how difficult it is at times to apply reason to the problems of the work place, and to achieve justice. This lesson is the first of five lessons (#69, 70, 74, 75 are the others) in this unit dealing with values. By showing that reason and justice are not always present in the manpower market, this lesson hints at a possible conflict of values -- the theme of lesson #69.

Lesson #69 (MAN IS MORE THAN A MEANS OF PRODUCTION) discusses the conflict of values in the world of work and examines some of the reasons for these conflicts. This lesson emphasizes that the individual is called on to make ethical judgments in the work place. The information on value conflicts in this lesson provides background for a discussion of "success", the all-important value of so many Americans.

WHAT PRICE SUCCESS?, lesson #70, gives the students an opportunity to think about the meaning and price of success. It discusses some of the various meanings of success in our society -- especially the relationship between money and success. This lesson also considers what it may "cost" the individual (and people close to him) when he pursues success vigorously.

Lesson #71 (FINANCING EDUCATION) is related to other lessons on education (e.g., #44, 55, 56, 64, 65) that emphasize the personal rewards and social benefits accruing to the individual and nation as a result of educational expenditures. Lesson #71 examines the other side of the coin -- how much does it cost to provide educational opportunities for the American people.

THE BENEFITS AND COSTS OF EDUCATION, lesson #72, is basically a review lesson (#28, 56, 64, 65, 71) designed to draw together some important facts and stimulate student discussion.

Lesson #73 (WILL ECONOMIC GROWTH SOLVE ALL OUR PROBLEMS?) illustrates that our nation hasn't reached all of its economic goals. Despite our rising GNP, we still have serious economic problems in the United States. This lesson should suggest to the students that they have a stake in solving our economic problems and that these problems present them with opportunities for demonstrating their leadership and other skills. There is plenty of unfinished business in our society which will be tended to only if men and women assume responsibility for the course that our nation follows. Because prosperity brings us more options, both individually and collectively, decision-making is becoming an increasingly important part of both our personal and social lives.

VALUE JUDGMENTS: IS IT POSSIBLE TO KNOW WHAT'S GOOD?, lesson #74, provides the students with an approach to valuing. This lesson is a logical follow-up to lesson #73, with its concern about economic problems and the need to make choices and decisions in order to solve them. Economic decisions involve making value judgments. The lesson also provides a lead-in to lesson #75 in that a person's values in our rapidly changing age will be influenced greatly by his world-view.

Lesson #75 (WORLD-VIEW FOR A CHANGING WORLD) presents a theme which is a logical ending for the course (though certainly not an end to choice and action on the part of the students). This lesson suggests to the students that everything they have learned about man, work, and economic life may contribute to formulating their own world-view. This world-view should be helpful to them in meeting the challenges and opportunities they will find in both the economic and noneconomic sides of their worker role. The world-view theme may also provide a new beginning for some students: an awareness of the need to structure their perception of the world in order to better understand their own lives. The "philosophical" nature of this lesson suggests a need for serious thought and deliberate action on the part of each student in order to make the most of his individual capabilities. Lesson #75 thus returns to the theme introduced in lesson #1 -- that education and work are means of discovering yourself and finding out what goals you want to achieve in life.

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## #67 What Do Employers Expect From Their Workers?

The purpose of this lesson is to provide the students with some idea of what employers expect from their employees. An understanding of employer expectations will be useful to the student when he prepares for entry into the manpower market. The lesson also provides some important information on the job application form and the job interview.

The figures 75% to 85% used on page 3 are reported in a General Motors pamphlet, "Can I Get the Job?", April 1963. The 60% to 90% reported on page 4 is used by William Menninger, the well-known psychologist, in an article (p. xiv) in MAN IN A WORLD AT WORK (Henry Borow, editor, 1964).

### Answers To Discussion Questions

PAGE 2, Top. SUGGESTED ANSWER: You can learn how to fill out a job application form by practicing on real or simulated forms, listening to workers tell about their experience in doing so, or reading about the forms in pamphlets and books. You can also practice, listen, and read to learn about how to participate in a job interview. Some of the mistakes that workers make in their job interviews are: They are too uncertain in what they want both in their starting job and in the long-run. They expect too much too fast, fail to investigate the company or industry they are interviewing, are unable to sell themselves and have a poor personal appearance (not neat and clean, over or under-dressed). They are overaggressive and "know it all", lack of confidence and poise, unable to express their ideas, and too interested in starting salaries. They ask no questions about the job and make excuses about unfavorable factors in their work or school record.

PAGE 2, Bottom. SUGGESTED ANSWER: Employers may ask such questions as: In what school activities have you participated? Why? Which did you enjoy the most? How do you spend your spare time? In what type of position are you most interested? Why do you think you might like to work for our company? What jobs have you held? How were the jobs obtained and why did you leave? Why did you choose your particular field of work? What are your ideas of salaries? Do you have a girl (boy) friend? Is it serious? What kind of boss do you prefer? What personal characteristics do you feel are necessary for success in your chosen field?

PAGE 3, Top. SUGGESTED ANSWER: Some of the additional characteristics and attitudes employers say they want their employees to have are: Reliability, efficiency, helpfulness, unselfishness, perseverance, foresight, courtesy, confidence, and poise.

PAGE 3, Bottom. SUGGESTED ANSWER: They are not satisfying identical wants; therefore, they expect to find different situations on the job. There may be differences between workers and employers regarding the goals and purposes of work and productive activity. In a study done in Ohio, for example, business employers were asked what they wanted young workers to

know about employment in the economy. In the majority of cases, they indicated special concern that young workers understand the importance of business profits. Workers and the general community showed less awareness and concern for this subject; their interest is in "good jobs" with "good pay". Employers and/or employees may also make unrealistic appraisals of one another and find that their expectations are not met. Employers and workers may not agree on what is meant exactly by an agreed-upon goal for the job or work place, such as "fair" or "reasonable" wages.

PAGE 4. SUGGESTED ANSWER. The following are some of the additional attitudes and values that cause workers to be fired from their jobs: Uncooperative or will not respect rules, dishonest or misrepresents, too little or too much ambition, too much attention to outside interests, not adaptable, a "troublemaker", and irresponsibility.

Extra Discussion Question

"What are some of the questions you might want to ask the employer about a job during an interview?" SUGGESTED ANSWER: The duties and responsibilities of the job; extent of authority that goes with the job; who you would report to; how much and how well the work is to be done (i.e., "performance standards"); how and who will evaluate your work; starting and quitting time and rest and lunch periods; is there a union?; what are the opportunities for continuing your education and training? what are the company's plans as they relate to your job and future? and what are the promotion policies?

SUGGESTED CLASSROOM ACTIVITY

Select one of your more mature and poised students to play the role of personnel interviewer representing a business enterprise. Call for volunteers, or pick three or four students to take turns being interviewed for a job (secretary, sales clerk, machine operative, shipping clerk, etc. -- you designate the job). Use the ideas in this lesson and TM to help the students conduct their interviews. Ask the class to comment on mistakes that the "job applicants" make in their interviews (if any) and point out some of the good points of the interviews.

Background Reading

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 138-141, 148-151, and 158-162.

## #68 Is There Reason and Justice in the Work Place?

The purpose of this lesson is to demonstrate that bias, injustice, emotion, and prejudice exist in the job. Knowledge of this situation should help the students cope with it when they enter the work place. The lesson also shows the students how difficult it is in some situations in the work place to know exactly what is reasonable or just. In Case #6, the reference to 'bids' refers to the system of applying for or "biding" for jobs which is part of some collective bargaining agreements. (On the basis of seniority, union members are given a chance to transfer to jobs that are available because of transfers, retirements, technological change, etc.)

### Answers to Discussion Questions

PAGE 2. SUGGESTED ANSWER: Will vary. In Case #1, the singing might be considered irrational by some students. If the singing is viewed as an attempt to break the monotony of the assembly line work, then it doesn't seem so irrational. Some students will probably consider the manager's order to stop singing both irrational and unjust. (Certainly from the standpoint of production it turned out to be irrational.) One thing is certain about the manager's behavior -- it didn't show a good understanding of the psychology and sociology of work. In Case #2, the Personnel Director's standards of evaluation will probably be considered both irrational and unjust by most of your students (especially the less-pretty girls). Some of the specific things a supervisor can do to assure rational and just treatment of his workers are: listen carefully and investigate thoroughly their complaints, watch their activities closely, stand behind his workers when he thinks they are right, don't have "favorites", and investigate carefully before disciplining his workers. PAGE 3. Case #3, SUGGESTED ANSWER: No correct answer. This case is based on an actual arbitration case in which the decsiion was in favor of the worker. The arbitrator pointed out that agreeing with the employer would mean any group of employees could bring about the discharge of a particular employee by refusing to work with him. Case #4. SUGGESTED ANSWER: Will vary, but in actual arbitration this case was decided in favor of management. The arbitrator decided that Small's actions were contrary to generally accepted labor-management relations. PAGE 4. Case #5. SUGGESTED ANSWER: Will vary, but cynics will say that Pete will get the job. Obviously, Charlie should get the job for he is better qualified. Case #6. SUGGESTED ANSWER: No correct answer, but the arbitrator in an actual case decided in favor of the company. He said that the company had not acted in an arbitrary manner and that the women were not entitled to a 30-day trial period.

### Background Readings


Anderson, DIMENSIONS OF WORK (pp. 3-8, 27-28, 39-45, 49-58, 60-62, 77-89, chapter 12)

Rosenberg, AUTOMATION, MANPOWER, AND EDUCATION (chapter 5 and 10).

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING (pp. 144-163).

Goodman, GROWING UP ABSURD (pp. 1-13, 59-69, 92-95, chapter 7 and 8).

CFEE, "Psychological Dimensions of Work", Technical Paper #2, 1967 (pp. 18-21).

## #69 Man Is More Than A Means of Production

The purpose of this lesson is to make students aware of differences in values that exist in our society and suggest the nature and causes of value conflicts. The lesson also encourages the student to think about his own values and the values of society as they relate to work.

You may want to discuss briefly the nature of values with your students. A value is an idea of what is good or bad and serves as a guideline or criterion in choosing. One way of clarifying the concept of values is to give the students some specific examples such as these: Political democracy (majority rule, minority rights, etc.), dignity of honest labor (work -- no matter of what kind -- gives dignity to man), honesty, justice or equal justice under the law (all men should be treated equally by the law and by the institutions and men who interprete the laws and administer justice), rationality (a rational approach to life) and dignity of man (man's right to live with dignity). If you hold the value of democracy, you choose representative government in preference to a dictatorship.

### Answers to Discussion Questions

PAGE 1. SUGGESTED ANSWER: My need for socio-economic status may clash with my other needs for independence and self-expression (for example, I can't express the unorthodox social and political views which I hold because they would offend my business associates and friends and lower their acceptance of me). There are many different ways in which meeting my needs may clash with the fulfillment of your needs (my economic security vs. your economic security and my dominance vs. your independence).

PAGE 2. SUGGESTED ANSWER: **Some roles we may perform include: stockholder, manager, union official, student, teacher, club member, soldier, girl friend, and elected public official. **The various roles we play lead to value conflicts because they demand different things from us -- often at the same time. We are expected to be many things to many people. **Some specific examples of conflicts of values that arise out of the roles we play are: Being a good "family man" vs. doing what is best for me as a worker. My being an executive and trying to get a pay raise for my workers vs. being a stockholder in the company and looking for bigger dividends. Being a good student vs. trying to be a good worker on a full-time job at the same time. Being a manager and disciplining a worker who also is a fraternal "brother". Being a good wife vs. being a good mother.

PAGE 3. SUGGESTED ANSWER: **Some examples of value conflicts between worker and work group are: I believe that honesty is the best policy, but my co-workers take office supplies home; do I report them? My fellow workers bet money in the plant on baseball, football, and basketball games though it is against company rules. I believe in upholding the rules and reporting violators. I believe that you should stand up for what you believe in, but my fellow workers always agree with the supervisors.

**Examples of conflicts of values within the individual include: My financial success vs. "being my own man". Looking out for myself vs. being my brother's keeper. Pleasing the boss vs. pleasing myself. Doing what is good for me in the short-run vs. doing what will be good for me in the long-run. **Some examples of value conflicts between individual workers are: You like to plan the work far in advance but I like to "fly by the seat of my pants." I am meticulous and slow in my work but you are fast and plunge right ahead. You are logical and well-organized in the work we do together but I like a "little clutter" and disorganization. You value promptness in getting the work done on time while I like to put things off as long as I can. **A few examples of conflicts of values between the worker and the organization include: I like to work as hard as I can but the other workers all say we should lay only so many bricks each day. The company says that I will retire at the age of 65, and I want to keep on working. I don't want to turn out a product that isn't of top quality but the company sets a production quota for me that requires me to rush my work. **If you have done a lot of thinking about your values in the past, and "tested" them in a variety of specific situations, you won't feel that it's necessary to reexamine them every time a new value conflict is encountered. On the other hand, a person can never know with absolute certainty that he is right. A man should indeed look at his values from time to time. Many philosophers and social scientists agree with Socrates that "The unexamined life is not worth living".

<u>Background Reading</u>

Anderson, DIMENSIONS OF WORK, pp. 5-8, 27, 28, 33-35, 39-45, 49-58, 60-62, 77-89, 134-147, and chapter 12.

Goodman, GROWING UP ABSURD, pp. 1-13, 36-49, 59-69, 88-95, chapter 1, 7 8, and 9.

Gardner, SELF-RENEWAL, chapter 1, 2, 5, 6, 7, 8, 9, 10, and 12.

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 144-165.

CFEE, Technical Paper #2, "Psychological Dimensions of Work", pp. 11-12 and 18-21.

## #70 What Price Success?

The purpose of this lesson is to encourage the student to think about his ultimate goals in life and what he values. We have focused attention on "success" (and its various meanings) since it is a goal sought by almost all Americans. This lesson should suggest to the students that they can also examine critically some other traditionally accepted values of our society, such as democracy, freedom, and discussion.

### Answers to Discussion Questions

PAGE 1. SUGGESTED ANSWER: Will vary. Answers to the second question should demonstrate that the students can see that their definitions of success do imply certain goals and values. If I define success in terms of power, then it follows that I want to pursue a career that will allow me to obtain power, e.g., business executive, elected public official, labor union official. I may value the rational use of power and feel a personal responsibility to achieve and use power in order to accomplish certain goals: ("All that is necessary for evil to triumph is that good men do nothing").

PAGE 2. SUGGESTED ANSWER: * The role of money will vary. Ask the students to explain why money is or is not so important in their personal definition of success. Have they thought about this realistically?
** "Money-getting" affects the lives of Americans in some of the following ways: It is the #1 use of our time. Even when we have more potential leisure time, we often spend this extra time on an extra job, e.g., "moonlighting". A person's status in the community is usually closely tied to his money-getting ability or that of his parents or grandparents. (Our social attitudes, ideas, and values are influenced by our status. The amount of social and political power we have is often closely related to our financial condition. The worth and value of institutions (especially business firms) and even men are measured by their money-making ability. *** Some examples of how money is used as a standard for valuing noneconomic behavior in our society are: The overall worth of a man, his behavior, and his life is judged in monetary terms: "He never amounted to much"; (meaning he never earned a high income). "He is a self-made man"; (meaning he earned a lot of money in his own business). "He is as honest as a dollar." "Every man has his price."

PAGE 3. SUGGESTED ANSWER: The answers to all four of these questions will vary. There is evidence to support the contention that many workers do "market" themselves and run a "rat race". The "costs" of this practice can be very high in terms of physical and mental health. Erich Fromm's THE SANE SOCIETY and MAN FOR HIMSELF discusses the "marketing" that many

of us do. THE ORGANIZATION MAN, William H. Whyte, Jr., and the LONELY CROWD, David Riesman, show the existence of the rat race in American life. An interesting sociological overview of the costs of the practices we are discussing is contained in SOCIAL PROBLEMS IN AMERICA (Costs and Casualties in an Acquisitive Society) by Henry C. Bredmeir and Jackson Toby. For a different outlook on money-getting, marketing yourself, and the so-called rat race, see Ayn Rand's THE VIRTUE OF SELFISHNESS and FOR THE NEW INTELLECTUAL. All seven of the books we have listed are available in paperback editions.

Extra Discussion Question

"What should be done about jobs that do not satisfy part of or all of the needs of men?" SUGGESTED ANSWER: Will vary, and can cover the range from "do nothing" to abolishing the job or having a machine do it.

Background Reading

Anderson, DIMENSIONS OF WORK, pp. 8-11, 29-31, 33-36, 60-62, 77-89, 134-147, and 156-159.

Goodman, GROWING UP ABSURD, pp. 1-13, 59-69, 87-95, 121, 124, chapter 7, 8, 9, and 10.

Isaacson, CAREER INFORMATION IN COUNSELING AND TEACHING, pp. 146-148 and 166-174.

CFEE, Technical Paper #2, "Psychological Dimensions of Work", pp. 2-4, 7, 8, and 13-21.

## #71 Financing Education

In this one lesson on the financing of education we can only scratch the surface of a highly complex topic. Textbooks, college courses, and volumes of statistical data have been published on school finance and the broader field of government taxes, borrowing, and spending. Our objective is the very limited one of creating awareness of the magnitude of the American educational establishment and some of the methods we use to meet the costs of education. Statistical data are included to provide a factual background and to emphasize that dollars are involved on the cost side of education as well as on the benefit side (lifetime earnings and increased national production). The data are highly perishable: their utility diminishes with the passage of time. Ohio data are merely illustrative.

If additional time were available for this topic, we would choose to explain in more detail the money-raising functions and problems of local school systems and the role of the state department of education in allocating funds for school programs. While young people are in school, they should learn something about the operation and financing of schools so that they will be able to function more intelligently a few years hence when they become taxpayers, parents, and voters.

References. There are some attractive charts on state and local government revenues and expenditures in Section III, School Conditions, EDUCATION: AN INVESTMENT IN PEOPLE (Basic Library item #p-8), especially pp. 53-54. McConnell has a useful discussion of public finance in ECONOMICS, pp. 141-155 and 679-683. There is a brief note on the costs of education in Innes, et al., THE ECONOMIC RETURNS TO EDUCATION, p. 18ff.

Our statistical sketch of the educational establishment, 1966-67, comes from Saturday Review magazine, October 15, 1967, p. 75. Ohio data are from the State of Ohio Educational Directory, 1966-67 school year, p. 48. Table I in the lesson is based on Table 21, p. 144, in the 1967 ECONOMIC REPORT OF THE PRESIDENT, which also contains (p. 146) a brief discussion of rising costs in education. Expenditures per pupil are taken from Table 70 on p. 57 of DIGEST OF EDUCATIONAL STATISTICS 1966, published by the U.S. Office of Education, Department of Health, Education, and Welfare. The reference to 5,800 tax reports and payment of 40 different taxes (p. 3 of the lesson) is from a Republic Steel Corporation article. (State-Local tax and spending data are available from a number of governmental and private sources.)

Questions. Page 2 -- #1, the total number of teachers is 2½ million (sum of the figures reported at the bottom on page 1 for elementary, high school, and college teachers); #2, there are 27 students for every teacher in Ohio's public and non-public elementary and secondary schools (2.7 million students divided by 100,000 teachers). Page 3--#1, #32 bil.(see Table I); #2, about one-eighth ($6 bil. divided by $49 bil.); #3, Ohio's expenditure per pupil was about $610 for the 1965-66 school year (95% of $641 equals $610); #4, $3 per day is invested in each student's education: whether

it is a good investment depends on how much benefit the student derives from his schooling, and student estimates of this will vary.

Page 4 -- #1, SUGGESTED ANSWER: Many people want to enjoy a free lunch, to have the benefits of better schools without paying the costs. They honestly do not understand the basic economic principle that it takes inputs to obtain outputs. Some voters suffer from the "fiscal illusion" that education doesn't cost as much if it is paid for by the federal government or stategovernment; they fail to see that these levels of government get their money from taxes just as local governments do (although it is true they make use of different taxes). They believe that if local tax increases are prevented, somehow the taxpayers will avoid paying the costs of good schools -- "somebody else will pay"! It should also be noted that there are some people who feel that we already have enough money -- indeed, more than enough -- to provide good schools "if only the money was spent more efficiently"! Page 4 -- #2, SUGGESTED ANSWER: There are important advantages in using a combination of all three types of taxes. Local property taxes stress the benefits-received principle and local discretionary influence: local citizens vote themselves higher taxes in order to have more money to improve their own local schools. State sales taxes provide a broad base of tax support -- everybody pays sales taxes -- and help the less wealthy communities increase the funds available to support their schools, thereby providing more equality of educational opportunity. Federal income taxes provide the largest single source of government revenues (more than $70 billion a year); and since school-trained men and women enter regional and national manpower markets and contribute their productive services to the national economy, there is justification for the federal government to pay part of the costs of schooling. Note: Other answers are possible, and you should ask students to support whatever answer they give, using facts and sound reasoning.

Supplementary Report for Classroom Discussion. Contact your Superintendent of Schools and ask for detailed information on the operating levies and bond levies currently in force in your school district. Discuss in class the various types of state and federal financial assistance that your school system receives, such as the State of Ohio School Foundation Program, Title III assistance under the National Defense Education Act of 1958, and Titles I and II under the Elementary and Secondary Education Act of 1965.

Extra Discussion Question -- "Do you have a moral obligation to repay society later for the public education you are getting now? If so, how can you repay society for its investment in your education?" SUGGESTED ANSWER: No correct answer, but might include the following for the second part: Work in a public service industry (e.g., as a teacher, policeman, government official); perform public service work in leisure time (e.g., YMCA, Salvation Army, Red Cross, Boy Scouts); try to do whatever job you have in the most productive manner; and be a good citizen (e.g., participate in governmental affairs and pay your taxes).

## #72 The Benefits and Costs of Education

This is basically a review lesson, recapitulating what has been covered in five previous lessons on the economic costs and benefits of education. The only new material is a brief discussion of the concepts of "social costs" and "social benefits" (also a reference to "psychic income" and "psychic benefits"). Our purpose is to clarify, emphasize, and reinforce what has been learned about the economics of education. Our technique is to require the student to recall a half-dozen important points, express them in his own words, and then explore their implications for policy and behavior. Note: psychic benefits are consumer-type benefits in that they take the form of personal want satisfaction rather than increased money flows.

References. See McConnell, ECONOMICS (pp. 101-105) for a brief discussion of social costs and social benefits; and see lessons #28, 56, 64, 65, and 71 in this course. The 1967 ECONOMIC REPORT OF THE PRESIDENT contains a brief note on social benefits (p. 145).

Answers to Questions. Bottom of page 1: students should explain their reasons for selecting whatever fact or idea they choose. You might ask other students to comment on some of the selections and explanations. NOTE: Our list on page 2 certainly is not the only correct listing; others are possible and perfectly appropriate. Page 2: These two questions are more or less rhetorical; we proceed to answer them in general terms in the ensuing paragraph. You might want to invite students to discuss some specific implications and practical uses, such as: "I'm not going to be a dropout." "I know that I don't have to go to college to earn a good salary; I can learn a skilled trade and be happy and well-paid doing work I enjoy." "I won't vote against all the school taxes when I become a homeowner, because I know that somebody must pay the costs if we want to have good schools."

Page 3: SUGGESTED ANSWER -- Although we do not have all the information we might like, we are beginning to learn that investments in education do pay off, both for the individual and for the economy and society as a whole. We can see that investments in "human capital" help expand our GNP, raise earnings, reduce unemployment, and yield returns that in many cases exceed the returns on investments in nonhuman capital. We still have a great deal to learn about the consumer-type benefits of education and the full social benefits such as effects on crime, mental and physical health, anti-social behavior, social dependency, etc.

Page 4: SUGGESTED ANSWERS -- #1, Many of the individual psychic benefits and the social benefits are left out of the calculations because it is difficult to attach quantitative values to them; -- #2, Answers will vary; the important thing is for your students to cite examples of each; -- #3, Same as #2; -- #4, Political courage will be required to increase the investments we make in low-income, minority-group youth. Greater equality of educational opportunity will mean removing some of the advantages that middle and upper income children now have. It will also require courage to increase taxes -- at local, state, and federal levels -- to pay the costs of increased public investment in human resources.

## #73 Will Economic Growth Solve All Our Problems?

This lesson has two objectives: 1) review of the three basic problems facing every economy; the seven economic goals; and the meaning of economic growth, with a note on our recent U. S. experience; and most importantly, 2) the lesson serves to identify a number of socio-economic problems that remain to be solved in the United States. It should be emphasized that these problems will be solved only if responsible men and women demonstrate the ability and determination to solve them. Economic growth alone -- increasing Gross National Product, even on a per capita basis -- will almost certainly not automatically solve all our problems.

Since much of this material is familiar, it should be possible to devote considerable time to the discussion questions. Give your students a chance to show their perception of various problems and comment on the relative seriousness of different problems. Your students are part of society and will inherit its problems, along with an accumulation of knowledge and wealth that can be used to solve them. Let your class explore and discuss these problems, against the background of economic understanding they have acquired in the course.

The diagram below the title simply illustrates that GNP rises over time, though not at a steady pace. The illustrations of "Guns" and "Butter" on page 3 are familiar to generations of economics students. "Butter" represents civilian consumer goods, while "Guns" represents goods required by the government for war and defense. During wartime, when resources are indeed scarce, civilians feel the pinch as less "Butter" is produced and more of our economic effort is directed to producing "Guns" for war. Every economy faces the problem of choice, whether between guns and butter, or between present (consumer) goods and future (investment) goods, or between public (government) goods and private goods (bought and sold in the marketplace).

References. The 2½% growth rate mentioned in the introduction and on page 2 is taken from lesson #65-2. Compounded annually, it doubles in a little over 28 years (see standard tables of compound interest). Other data on past growth of the U. S. economy come from lesson #65 and the 1967 ECONOMIC REPORT OF THE PRESIDENT, p. 213. Per capita GNP for U. S. and underdeveloped countries come from R. E. Baldwin, ECONOMIC DEVELOPMENT AND GROWTH (New York: John Wiley, 1966) page 4. Rates of inflation for 1966 and 1967 are derived from changes in the Consumer Price Index as reported in various places including the December 1967 issue of ECONOMIC INDICATORS. Unemployment rates for negro teenagers are reported in HANDBOOK OF LABOR STATISTICS 1967 (U. S. Department of Labor, Bulletin #1555, U. S. GPO-1967) p. 87. The figure of $60 billion for national defense for 1966 is from the 1967 ECONOMIC REPORT OF THE PRESIDENT, p. 213, and student enrollment of 56 million is from lesson #75-1. Data on poverty are calculated from national income data and poverty statistics reported in the SOCIAL SECURITY BULLETIN, January 1965. McConnell discusses economic growth in chapters 20, 21, 38, 41 of ECONOMICS.

Answers to Questions. Page 2 -- SUGGESTED ANSWER: Responses will vary with individual students. It is an economic problem because the way we develop and use resources (especially human resources) will influence the situation. For example, poverty is an economic problem because -- in the affluent U. S. -- it reflects a highly unequal distribution of income. Pollution of air and water are economic problems because we are destroying natural resources by using our manpower, capital, and land in destructive ways (dumping chemical wastes into streams and exhausts fumes into the air). Page 3 -- SUGGESTED ANSWER: A rich country has more resources and more goods and services, which means that it can satisfy more consumer wants and/or invest more in human and nonhuman capital. A rich country can provide schools, build roads, protect its citizens, conserve its natural resources, afford recreational opportunities, provide medical services, etc. In a poor country, the people do well to have enough food, shelter, and clothing.

Page 4 -- SUGGESTED ANSWER: #1, Economic growth is the steady increase in GNP per person over long periods of time. Growth increases the productive capacity of the economy, allows higher levels of living for consumers, increases the military strength of the nation, and permits people to reduce their hours of work and enjoy more leisure. Some possible disadvantages: growth means change, which often disrupts the lives of people and requires painful adjustments. Growth has led to population increase, urbanization, impersonalization, pollution, and the need to keep on growing in order to avoid social and economic chaos that might result from mass unemployment and stagnant income. --#2, Economic growth can provide additional jobs and improvements in the operation of the manpower market. With increased output, we can clear the slums and build new and improved housing (either through private investment or government programs). Pollution can be controlled by investing additional resources in water and air purification and prevention of further pollution. Riots can be prevented by meeting the needs of our people, especially disadvantaged negroes: providing them job opportunities, better schools, participation in our political life, improved housing. --#3, Examples of wise or unwise use of additional output will vary among students. One constructive use would be improved educational opportunities for all Americans. A destructive use might be producing more drugs, liquor, cigarettes. --#4, Response will vary. Likely candidates are overpopulation, growing resentment of the poor nations vis-a-vis the rich nations, threat of war, communism, fascism. The important thing is for the students to explain their reasons for picking a particular problem.

## #74 Value Judgments: Is It Possible to Know What's Good?

This lesson might alternatively be entitled, "Toward a rational approach to valuing". Is the world of ethical value fundamentally different from the world of scientific fact? Is the purpose of education simply to find out how to do something, or do we expect education to help us know what is worth doing? Certainly this brief lesson will not provide final answers to any of these questions. In fact, our purpose is merely to create some awareness of the problem of values and suggest that it might be possible to resolve some of our value problems by using a rational-empirical approach closely akin to the Five Steps in Economic Reasoning.

References. Review lesson #69 (Man Is More Than A Means of Production), including the readings cited in that TM. Other sources include some observations on values by Michael Scriven from the "Social Science Education Consortium Newsletter", Purdue University, Vol. 2, No. 1, April 1966, and a paragraph from Charles Freeman's article for the National 4-H Foundation on "Citizenship Is Our Responsibility". Prof. Clarence Ayres, an economist at the University of Texas, has contributed much to our understanding of values and the role they play in economic life. See his book, TOWARD A REASONABLE SOCIETY (Austin: University of Texas Press, 1961).

Answers to Questions. Page 1 -- the Five Steps in Economic Reasoning are listed in lessons #15 and #52. Page 2 -- SUGGESTED ANSWER: Will vary, as individual students respond differently. Sally might think about the value of honesty and truth-telling (especially if she were asked, point-blank whether she saw Fred cheating). She also would think of the values of friendship and loyalty. Should she "tattle" and get him in trouble? Should she talk with him, and risk his anger and resentment? Certainly these values do clash. Her problem is to weigh and rank the values and act accordingly. Page 3 -- SUGGESTED ANSWERS: #1, We can't decide the economic goals we want and the policies we'll follow to achieve the goals without making value judgments. --#2, Our values come from parents, friends, church, school, personal experiences. The values of love, loyalty, cleanliness come from home training. Honesty, courtesy, nonviolence are among the Ten Commandments that many people learn in Sunday school and church. Good health, equality of opportunity, human development are values that might be learned in school and experiences with other people. --#3, Responses will vary, but a strong case can be made that values certainly do change over time. Greater equality for women is a widely-accepted value today in contrast to 50 years ago. Corporations and labor unions were considered evil and illegal in the 1800's but are generally accepted today. Income taxes formerly were considered "socialistic" in the United States but today are considered to be an important feature of a democratic society. Political equality was ridiculed in the early 1800's, but today every adult -- men, women, property owners, nonowners -- has the right to vote. --#4, They can try to follow the five suggestions listed on page 4. (Note: This question is intended to prepare the class for consideration of these five points.)

Page 4 -- SUGGESTED ANSWERS: #1, Response will vary, but students should explain the reasons for their answers. Consider the implications of accepting the idea that everyone has a perfect right to hold any values he might choose. (Jimmy believes that it is perfectly all right to steal, but Mary believes stealing is wrong. How do you resolve the conflict when Mary's transistor radio disappears from her room and shows up in Jimmy's car?) Are the rules of social relations simply a question of what is legal? Should laws reflect values, or values reflect laws? How do we decide which laws are good and which ones ought to be changed because they are not good? --#2, If a person refuses to "be reasonable" you could ask a third party to arbitrate the dispute, or punch him in the nose, have nothing to do with him. These last two methods of "relating to other people" would probably not be acceptable to most people. --#3, Nobody knows for sure whether a rational method of analyzing value differences between Russia and the U. S. (as well as China and other countries) would work, but it might be interesting to try. Ask your students if they feel that we have always been "reasonable" in our dealings with other countries. Have the other countries been reasonable in dealing with us? Ask for specific examples.

## #75 World-view for a Changing World

This lesson gives students an opportunity to tie together many of the ideas they have explored about man, work, and economic life. It is basically a vehicle for discussion. Hopefully, the lesson will be stimulating, provocative, and open-ended. There aren't any "must-know" facts, with the possible exception of knowing what the term "world-view" means and why it is important.

There are a number of concepts introduced that might spark a lively discussion: the meaning and importance of a "philosophy of life", the connection between economics and moral philosophy (ethics and values), the forces of change, the evolution of capitalism, the cultural impact of technological change, "self-renewal", need for individual and social planning and action.

References. John Gardner's SELF-RENEWAL (The Individual and the Innovative Society) is an excellent reference for this lesson and is strongly recommended for your own background reading, particularly the Introduction and Chapter 11. Paul Goodman's GROWING UP ABSURD is a useful general reference, as is Jerry M. Rosenberg's AUTOMATION, MANPOWER, AND EDUCATION. The excerpt from ECONOMICS AND MAN (by John S. Gambs and Sidney Wertimer, published by R. D. Irwin Co., 1959) adapted from page 173.

Answers to Questions. Page 2 -- #1, ANSWER: The San Francisco earthquake and fire; #2, SUGGESTED ANSWER: Many people act as if they are unaware of the forces of change at work in our technological-economic-social world and do not see the need to solve problems before they get "out of hand". These forces include the rapid rate of technological change (automation, cybernation); the growth of population (in the U. S., from 76 million in 1900 to 200 million in 1967; and world population growth from 2 billion in 1925 to 6 billion projected for the year 2000); rising expectations of disadvantaged minorities (negroes in the U. S., Asians and Africans in the world).

Page 3 -- #1, Answers will vary; #2, Will vary (some of the differences are the growth of government, large multi-billion-dollar corporations, and powerful labor unions); #3, Will vary ("people are poor because they are lazy"; "they are poor because they haven't had adequate opportunities for education and good jobs"). The questions in the middle of page 3 are strictly rhetorical.

Page 4 -- #1, SUGGESTED ANSWER: Because some people are afraid of the possible harmful effects of automation (loss of jobs, depersonalization of work and interdependent economic relationships, breakdowns of complicated electric power systems such as the blackout in New York and the East coast in 1965), they overlook the potential benefits of automation (being able to produce more and better goods, shorter hours of work, more leisure, higher pay). #2, SUGGESTED ANSWER: Response will vary, but should center around the need to develop oneself through education, good health, forming a constructive world-view and philosophy of life. #3, SUGGESTED ANSWER: Will vary; might include the theme of technological change and need for appropriate institutional adjustments, as well as different values. Ask the students to explain and comment on John Gardner's statement: "Part of our problem is how to stay awake on a full stomach." #4, SUGGESTED ANSWER: Get a good education, plan wisely for the future, participate in community decisions: don't be a "social dropout".

Appendix I

# A BASIC MANPOWER ECONOMICS LIBRARY

What background information, data, and general understanding would be of value to teachers and vocational guidance counselors who want to help students explore the world of economics and the role of work in the life of man?

The 26 publications included in the following annotated bibliography are intended to serve as a basic list for a small but balanced library. The list includes ten books, six government documents, two pamphlets, and a representative list of eight publications from private organizations actively concerned with manpower and economic problems. Total cost of the basic library in 1967 was $54.70 and included three free items.

This list is basic. It is by no means comprehensive. Selections were made with a particular clientele in mind -- junior and senior high school teachers and vocational guidance counselors -- and a particular purpose in view: helping these same educators strengthen their competence in the manpower field. The materials are intended to be read and used by teachers, not students. The selections include ideas, concepts, information, and statistical data that should prove useful in explaining to students the manpower market and the broader economic and social world.

Suggestions were reviewed by economists, educators, vocational guidance counselors, manpower specialists, and other interested scholars; and final selections were made by the staff of the Ohio University Center for Economic Education. The publications are recommended as being reliable, relevant, and representative of the growing literature in the manpower field.

## A BASIC MANPOWER ECONOMICS LIBRARY

(Items are listed in the order of their estimated importance and usefulness to teachers and vocational guidance counselors.)

1. Manpower Report of the President 1967, U. S. President and U. S. Department of Labor. Washington: U. S. Government Printing Office, April, 1967. Paperback, 285 pp., $1.50.

   Comprehensive and authoritative source of statistical data, analysis, and information on manpower trends and federal government policies dealing with the manpower dimension of our economy. Published annually since 1963 under provisions of the Manpower Development and Training Act of 1962.

2. Employment, Unemployment, and Public Policy, Seymour L. Wolfbein. New York: Random House, 1965. Paperback, 210 pp., $2.25.

   Brief analytical introduction to the economics of the manpower revolution and government programs designed to deal with manpower problems.

3. Occupational Outlook Handbook (Career Information for Use in Guidance, 1966-67 Edition), U. S. Department of Labor, Bureau of Labor Statistics. Bulletin No. 1450. Washington: U. S. Government Printing Office, 1966. Paperback, 858 pp., $5.00.

   Detailed look at present and future occupational structure of the American economy, with more than 700 specific job descriptions. Revised edition is published every two years.

4. The Manpower Revolution (Its Policy Consequences, Excerpts from Senate Hearings before the Clark Committee), Garth L. Mangum (ed.). New York: Doubleday, 1966. Anchor paperback, A522, 580 pp., $2.45.

   Excerpts from statements made by economists, educators, businessmen, labor leaders, and others who testified in 1963 Hearings conducted by the Senate Subcommittee on Employment and Manpower (Sen. Joseph S. Clark, Chairman). Describes the dimensions and consequences of the manpower revolution, with suggestions for solving our manpower problems.

5. Career Information in Counseling and Teaching, Lee E. Isaacson. Boston: Allyn and Bacon, 1966. 430 pp., $8.50.

   College textbook designed for education courses in Occupational Information. Useful to teachers and counselors in helping students find career information and counseling them on vocational opportunities and educational planning.

6. Economics: Principles, Problems, and Policies, 3rd Edition, Campbell R. McConnell. New York: McGraw-Hill, 1966, 791 pp., $8.95.

   Standard college introductory economics textbook which can serve as encyclopedia-type reference.

7. Economic Ideas and Concepts (Part I, Teacher's Guide to Developmental Economic Education Program), James Calderwood. New York: Joint Council on Economic Education, 1964. Paperback, 45 pp., $.50.

Concise explanation of economic terms and concepts identified by the National Task Force on Economic Education as "essential understandings" for mastery by high school graduates.

8. Economic Report of the President 1967, U. S. President and Council of Economic Advisers. Washington: U. S. Government Printing Office, 1967. Paperback, 314 pp., $1.25.

Detailed look at the U. S. Economy, its recent performance, expectations for the near future, and policies advocated by the President to ensure continuing growth. Special section on education; 101 pages of up-to-date statistics; published annually in January.

9. Pocket Data Book, U.S.A. 1967, U. S. Department of Commerce, Bureau of the Census. Washington: U. S. Government Printing Office, December, 1966. Paperback, 368 pp., $1.50.

Compact and attractive compendium of tables and charts on basic U. S. economic and related data.

10. Dimensions of Work: The Sociology of Work Culture, Nels Anderson. New York: McKay, 1964. Paperback, McKay Social Science Series, 202 pp., $2.50.

Introduction to the social framework of work, including the nature and meaning of work in our culture, the "instinct of workmanship", technology, and social change.

11. Automation and Economic Progress, Howard R. Bowen and Garth Mangum (eds.). Englewood Cliffs, New Jersey: Prentice-Hall, 1966. Paperback, Spectrum Books, S-147, 170 pp., $1.95.

Problems and possibilities of an economy characterized by rapid and sweeping technological change; includes condensation of the 1966 Report of the National Commission on Technology, Automation, and Economic Progress and selections from supplementary studies.

12. The Economic Returns to Education (A Survey of the Findings), Jon T. Innes, Paul B. Jacobson, and Roland J. Pellegrin. Eugene, Oregon: University of Oregon, Center For The Advanced Study of Educational Administration, 1965. Paperback, 45 pp., $1.00.

Survey of major studies undertaken to determine the economic value of education, with 32-item bibliography. (This monograph illustrates a type of scholarly publication that is increasingly becoming available in the field of manpower economics and human resources.)

13. Automation, Manpower, and Education, Jerry M. Rosenberg. New York: Random House, 1966. Paperback, SED 5, 179 pp., $1.95.

Educational implications of automation as a form of technological change, and the manpower challenge it creates. Surveys programs designed to meet the manpower revolution, and suggests education's responsibilities in preparing students and others for changing job markets.

14. Self-Renewal (The Individual and the Innovative Society), John W. Gardner. New York: Harper & Row, (c) 1963. Paperback, Harper Colophon Books, 1965, CN/544, 141 pp., $1.45.

Emphasizes the need for continuous change in both the individual and institutions in our society. Suggests that if we are to grow both as individuals and as a nation, we must adopt an outlook on life and institutional arrangements which emphasize the need for innovation and creativity.

15. Man, Education, and Work (Post-Secondary Vocational and Technical Education), Grant Venn. Washington: American Council on Education, 1964. Paperback, 184 pp., $1.50.

A look at the relationship between man, his education and training, and his work. Suggests that education is now the key to employability. Surveys the changes taking place in the manpower market, the development and current state of vocational and technical education, some major issues and recommendations.

16. Growing Up Absurd (Problems of Youth in the Organized Society), Paul Goodman. New York: Random House, 1960. Paperback, Vintage Books, V-32, 296 pp., $1.45.

Surveys the present state of our society and asks such fundamental questions as: How is it possible to have more meaning and honor in work? Discusses the need to give young people a really worthwhile world to grow up in.

17. Occupational Outlook Quarterly, U. S. Department of Labor, Bureau of Labor Statistics, Washington, D. C. (Quarterly, issued in February, May, September, and December.) About 30 pp., annual subscription, $1.25.

Provides counselors with current information on employment trends and outlook, based primarily on research and statistical programs of the Bureau of Labor Statistics. Supplements and up-dates information in the Occupational Outlook Handbook.

18. Ohio Labor Market Information, Ohio Bureau of Employment Services, Division of Research and Statistics, Columbus, Ohio. Subscription free.

There are six reports in the Ohio Labor Market Information series. "Employment, Hours, and Earnings In Ohio" is ussued monthly. "Ohio Labor Market" issued bimonthly. "Shortage and Surplus Occupations" issued quarterly. "County Labor-Force Reports" revised every four months. "Covered Employment and Payrolls" issued quarterly and annually. "Labor Turnover Rates in Ohio" issued monthly.

Note: Similar reports are available from the Labor Department or Employment Service in each of the 50 states. Additional reports and data on state and local employment conditions are also available from the Ohio Bureau of Employment Services and from employment security agencies of the various states.

## Representative Publications of Private Organizations

The following list illustrates the type of material available from private economic-interest organizations on the many dimensions of the manpower revolution. Frequently publications of this type are available to teachers and counselors for classroom use on a complimentary basis. The listing of these items does not imply that the Ohio University Center For Economic Education or its staff agrees with or endorses any ideas or conclusions contained in the publications.

p-1. Raising Low Incomes Through Improved Education, Committee for Economic Development. New York: Committee for Economic Development, September, 1965. Paperback, 48 pp., $.75.

Statement by a private organization of businessmen and educators, recommending certain improvements in education and training designed to raise the productivity and earnings of many Americans who otherwise would have a below-average standard of living.

p-2. Labor Looks at Automation, Publication No. 21, American Federation of Labor and Congress of Industrial Organizations. Washington: AFL-CIO, December, 1966. Paperback, 36 pp., Single copy free.

Organized labor's view of the pace of technological change and the need for adopting private and public policies to ensure that the price of technological progress is not too high.

p-3. The Disadvantaged Poor: Education and Employment, Third Report of the Task Force on Economic Growth and Opportunity. Chamber of Commerce of the U. S. Washington: Chamber of Commerce of the United States, 1966. Paperback, 444 pp., $5.00.

Study of basic facts and issues concerning education, employment, and opportunity as they relate to poverty and low incomes. Recommendations for programs to reduce poverty.

p-4. The Role of Wages In A Great Society (Stressing Minimum-Wage Gains to Help the Working Poor), Leon H. Keyserling. Washington: Conference on Economic Progress, February, 1966. Paperback, 113 pp., $1.00.

Discussion of economic policies to raise the earnings of the "working poor," written by a former chairman of the Council of Economic Advisers, currently President of the Conference on Economic Progress.

p-5. Programs to Aid the Unemployed in the 1960's, Joseph M. Becker, William Haber, and Sar A. Levitan. Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research, January 1965. 42 pp., single copy free.

Recommended alleviative and curative programs to aid the unemployed. Since its founding in 1945, the Upjohn Institute has published numerous studies on employment and unemployment.

p-6. A "Freedom Budget" for All Americans (Budgeting our Resources, 1966-1976 to Achieve "Freedom From Want"), A. Philip Randolph Institute. New York: A. Philip Randolph Institute, October, 1966. Paperback, 84 pp., $1.00.

Spells out a step-by-step course of action for "the practical liquidation of poverty in the U. S. by 1975," with proposals for improved housing, education, employment, and guaranteed incomes. Emphasis on racial problems.

p-7. Unemployment: The Nature of the Challenge, A Report to the Economic Policy Committee, Chamber of Commerce of the United States. Washington: Chamber of Commerce of the United States, July, 1965. Paperback, 36 pp., $.50.

Discussion of the unemployment problem and its possible causes and solutions, with special emphasis on youth.

p-8. Education, An Investment in People, Chamber of Commerce of the United States, Education Department. Washington: Chamber of Commerce of the United States, 1964-1965. Paperback, 58 pp., $1.50.

Chartbook (8½ x 11, color) showing the close correlation between levels of education and economic well-being of the individual and society, trends in educational attainment, and patterns of American education.

M&EE:oael/rldpep/1968/BMEL

Appendix II

## LESSONS IN 'MANPOWER & ECONOMIC EDUCATION' COURSE

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Appendix III

## LESSON IDENTIFICATION, BY THEME*

(And Index to Student and Teacher Materials)

| (1) LESSONS INCLUDED UNDER BASIC THEMES | (2) CODE | (3) LESSON NUMBER | (4) PAGE (SM) | (5) PAGE (TM) |
|---|---|---|---|---|
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| What Are the Three Basic Problems Facing Every Economic Society? | E 2 | 3 | 9 | 5 |
| Economic Institutions | E 3 | 4 | 13 | 6 |
| Capitalism: "The Anatomy of Free Enterprise" | E 4 | 5 | 17 | 7 |
| The Circular Flow of Economic Activity | E 5 | 6 | 21 | 8 |
| The Division of Labor and Economic Interdependence | E 6 | 7 | 25 | 9 |
| Wages, Earnings, and Family Income | E 7 | 9 | 33 | 11 |
| Gross National Product and Some Fundamentals of Economic Statistics | E 8 | 11 | 41 | 15 |
| Scarcity, Opportunity Costs, and Choice | E 9 | 12 | 45 | 16 |
| "There Is No Such Thing as a Free Lunch" | E 10 | 13 | 49 | 17 |
| Models, Theories, and the Real World | E 11 | 14 | 53 | 18 |
| Economic Goals of the American People | E 12 | 16 | 59 | 21 |
| "The Business of America is Business" | E 13 | 17 | 63 | 22 |
| Government's Role in our Economic Life | E 14 | 18 | 67 | 23 |
| The Role of Labor Unions | E 15 | 19 | 71 | 24 |
| Consumers of Abundance | E 16 | 20 | 77 | 25 |
| The Economic World and Work: A Review Lesson | E 17 | 24 | 95 | 30 |
| Evolution of the Industrial System | T 3, E 17x | 25 | 97 | 33 (cont.) |

* Following is a list of lessons grouped according to each of the seven basic themes found in MANPOWER & ECONOMIC EDUCATION: Opportunities in American Economic Life. This table illustrates another way of organizing the sequence of lessons, namely, by theme, rather than by the designated numerical sequence (which was structured to provide variety and pace). Each of the 75 lessons is identified as part of a specific theme, e.g., "E4" is the fourth lesson in the "World of Economics" theme. In eight instances, individual lessons are identified as part of two different themes: e.g., lesson #25 (Evolution of the Industrial System) is included as "T3" under "Technology and Change" and also as "E17x" under "World of Economics". (The "x" indicates a secondary classification.) Note that the order in which the themes are listed (and the individual lessons under the themes) does not necessarily indicate the only possible arrangement. Column (1) of the table identifies the themes (underlined) and includes a list of lessons under that theme. Column (2) provides the letter code assigned each theme and the letter and numerical code for each lesson. The code number for the lessons is the same number found at the bottom of the lessons as they appear in both the student material and teacher manual. Column (3) is the consecutive numbering assigned to lessons as they appear in the student material and teacher manual. Column (4) gives the page number of the lesson in the student material. Column (5) lists the page number of the lesson in the teacher manual.

| (1) LESSONS INCLUDED UNDER BASIC THEMES | (2) CODE | (3) LESSON NUMBER | (4) PAGE (SM) | (5) PAGE (TM) |
|---|---|---|---|---|
| Education: Engine of Our Nation's Economic Growth | S 7,E 17xx | 65 | 273 | 108 |
| Will There Be Enough Jobs for Everyone? | E 18, M 8x | 66 | 277 | 109 |
| Will Economic Growth Solve All Our Problems? | E 19 | 73 | 305 | 123 |
| TOTAL NUMBER OF LESSONS WITH "E" CODE: 21 | | | | |
| Nature of Work and Its Noneconomic Aspects | "N" | | | |
| Education and Work: A Means of Discovering Yourself | N 1 | 1 | 1 | 3 |
| The Joy of Work | N 2 | 10 | 37 | 12 |
| The Nature and Functions of Work | N 3 | 26 | 101 | 34 |
| The Job: Satisfaction or Disappointment? | N 4 | 29 | 113 | 38 |
| The Long Arm of the Job | N 5 | 33 | 131 | 43 |
| An Affair of the Heart | N 6 | 36 | 143 | 50 |
| Making Something Out of Your Job | N 7 | 38 | 155 | 53 |
| "A Sure Sense of His Own Usefulness" | N 8 | 39 | 159 | 54 |
| Work and Mental Health | N 9 | 42 | 173 | 59 |
| Aspiration and Achievement | N 10, D 1xx | 46 | 191 | 71 |
| "I'm a --Physical, Social, Psychological-- Person!" | N 11, D 2x | 48 | 199 | 73 |
| Work: Test Site of Human Relations | N 12 | 60 | 253 | 101 |
| Is There Reason and Justice in the Work Place? | N 13 | 68 | 285 | 115 |
| Man Is More Than A Means of Production | N 14 | 69 | 289 | 116 |
| What Price Success? | N 15 | 70 | 293 | 118 |
| TOTAL NUMBER OF LESSONS WITH "N" CODE: 15 | | | | |
| Decision-Making and Planning | "D" | | | |
| What Are the Steps in Economic Reasoning? | D 1 | 15 | 57 | 19 |
| "...But Women's Work is Never Done" | O 7, D 1x | 41 | 169 | 57 |
| Aspiration and Achievement | N 10,D 1xx | 46 | 191 | 71 |
| "Who Am I? What Am I Becoming?" | D 2 | 47 | 195 | 72 |
| "I'm a --Physical, Social, Psychological-- Person!" | N 11, D 2x | 48 | 199 | 73 |
| The Formula: Aspirations + Ability + Action = Achievement | D 3 | 49 | 203 | 75 |
| Housewife or Career Girl? | D 4, O 9x | 50 | 207 | 76 |
| First the Plan, Then the Job! | D 5 | 51 | 211 | 78 |
| An Exercise in Economic Reasoning: Review Lesson | D 6 | 52 | 215 | 81 |
| Value Judgments: Is It Possible to Know What's Good? | D 7 | 74 | 309 | 125 |
| World-view for a Changing World | D 8, T 3x | 75 | 313 | 127 |
| TOTAL NUMBER OF LESSONS WITH "D" CODE: 11 | | | | |

(cont.)

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| LESSONS INCLUDED UNDER BASIC THEMES | CODE | LESSON NUMBER | PAGE (SM) | PAGE (TM) |
| Manpower Market | "M" | | | |
| The Manpower Market: Men and Jobs | M 1 | 27 | 105 | 35 |
| Measuring the Manpower Market | M 2 | 30 | 117 | 39 |
| The Changing Manpower Market | M 3 | 31 | 121 | 40 |
| Collective Bargaining | M 4 | 32 | 125 | 41 |
| How Do I Find a Job? | M 5 | 53 | 219 | 87 |
| Portrait of the Unemployed | M 6 | 57 | 239 | 93 |
| Men and Women Without Jobs | M 7 | 58 | 243 | 96 |
| Help for the Unemployed | M 8 | 59 | 249 | 99 |
| Will There Be Enough Jobs for Everyone? | E 18, M 8x | 66 | 277 | 109 |
| What Do Employers Expect of Their Workers? | M 9 | 67 | 281 | 114 |
| TOTAL NUMBER OF LESSONS WITH "M" CODE: 10 | | | | |
| Occupations and Employment Trends | "O" | | | |
| The Work That People Do | O 1 | 8 | 29 | 10 |
| Are Today's Skills Good Enough for Tomorrow's Jobs? | O 2 | 23 | 89 | 29 |
| Finding the Trees in the Employment Forest | O 3 | 34 | 133 | 46 |
| On Top in the Service-Producing Era | O 4 | 35 | 137 | 49 |
| Farm, Blue-collar, and Service Workers | O 5 | 37 | 149 | 52 |
| They Get the Work Done in American Industry | O 6 | 40 | 163 | 55 |
| "...But Women's Work is Never Done" | O 7, D 1x | 41 | 169 | 57 |
| Occupational Needs in the 1970's | O 8 | 43 | 177 | 62 |
| Employment by Industry: Projections for 1975 | O 9 | 45 | 187 | 67 |
| Housewife or Career Girl? | D 4, O 9x | 50 | 207 | 76 |
| Where the Jobs Are | O 10 | 61 | 257 | 102 |
| A Case Study: Where the Jobs Are in Ohio | O 11 | 62 | 261 | 105 |
| Employment -- From the Roaring '20s to the Shifting '60s | O 12 | 63 | 265 | 106 |
| TOTAL NUMBER OF LESSONS WITH "O" CODE: 13 | | | | |
| Skills and the Economic Value of Education | "S" | | | |
| "What's In It for Me?" | S 1 | 28 | 109 | 37 |
| Will It Take a Good Education to Get Tomorrow's Jobs? | S 2 | 44 | 181 | 65 |
| Skills for Your Skill Bank | S 3 | 54 | 225 | 88 |
| How Can I Get the Skills Needed for Tomorrow's Jobs? | S 4 | 55 | 231 | 90 |
| Education: An Investment in Human Resources | S 5 | 56 | 235 | 92 |
| Education's Payoff | S 6 | 64 | 269 | 107 (cont.) |

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| LESSONS INCLUDED UNDER BASIC THEMES | CODE | LESSON NUMBER | PAGE (SM) | PAGE (TM) |
| Education: Engine of Our Nation's Economic Growth | S 7,E 17xx | 65 | 273 | 108 |
| Financing Education | S 8 | 71 | 297 | 120 |
| The Benefits and Costs of Education | S 9 | 72 | 301 | 122 |
| TOTAL NUMBER OF LESSONS WITH "S" CODE: 9 | | | | |
| Technology and Change | "T" | | | |
| The Knowledge Explosion: Technology, Automation, and Cybernation | T 1 | 21 | 81 | 27 |
| Benefits and Burdens of Technological Change | T 2 | 22 | 85 | 28 |
| Evolution of the Industrial System | T 3, E 17x | 25 | 97 | 33 |
| World-view for a Changing World | D 8, T 3x | 75 | 313 | 127 |
| TOTAL NUMBER OF LESSONS WITH "T" CODE: 4 | | | | |

Appendix IV

## VISUAL ILLUSTRATIONS*


| Title (or Theme) | Page |
|---|---|
| TECHNOLOGY STIMULATES ECONOMIC GROWTH | 8 |
| THE WORLD OF WORK: RESOURCES, TECHNOLOGY, INSTITUTIONS | 12 |
| EDUCATION AND TRAINING TO DEVELOP SKILLS | 48 |
| THE CHANGING WORLD OF WORK: A MODEL | 56 |
| STEPS IN ECONOMIC DECISION-MAKING | 58 |
| TECHNOLOGY STIMULATES ECONOMIC GROWTH AND CREATES BOTH OPPORTUNITIES AND PROBLEMS | 76 |
| ROLES IN ECONOMIC LIFE: CONSUMER, INCOME-EARNER, CITIZEN | 80 |
| SKILLS: MEANS TO EMPLOYMENT | 94 |
| THE CHANGING AMERICAN ECONOMY | 100 |
| ROLES IN ECONOMIC LIFE: INCOME-EARNER, CITIZEN, CONSUMER | 112 |
| SUCCESS IN THE WORLD OF WORK | 116 |
| COLLECTIVE BARGAINING AND THE CHANGING WORLD OF WORK | 130 |
| THE ECONOMIC VALUE OF EDUCATION FOR WHITE-COLLAR WORKERS | 142 |
| THE LONG ARM OF THE JOB | 148 |
| EMPLOYMENT IN THE CHANGING AMERICAN ECONOMY | 154 |
| THE WORLD OF WORK: MAKING SOMETHING OUT OF YOUR JOB | 158 |
| JOB SATISFACTION IN THE CHANGING WORLD OF WORK | 162 |
| SUPPLY AND DEMAND IN THE MANPOWER MARKET | 168 |
| APPLYING THE STEPS IN RATIONAL DECISION-MAKING TO MENTAL HEALTH | 176 |
| EMPLOYMENT AND THE ECONOMIC VALUE OF EDUCATION | 186 |
| ACHIEVEMENT THROUGH EDUCATION AND TRAINING | 194 |
| A JOB CAN INFLUENCE WHO WE ARE AND WHAT WE ARE BECOMING | 198 |
| RESOURCES, TECHNOLOGY, INSTITUTIONS AFFECT OUR PERSONAL DEVELOPMENT | 202 |
| ASPIRATIONS AND ACHIEVEMENT IN THE WORLD OF WORK | 206 |
| PLANNING AND RATIONAL DECISION-MAKING FOR JOB CHOICE | 214 |
| FINDING A JOB IN THE HUMAN RESOURCES ERA | 224 |
| SKILLS CONTRIBUTE TO HIGHER LIVING STANDARDS AND ECONOMIC GROWTH | 230 |
| UNEMPLOYED WORKERS ARE "CASUALITIES" OF TECHNOLOGICAL CHANGE | 248 |
| VALUE CONFLICTS IN ECONOMIC LIFE | 292 |

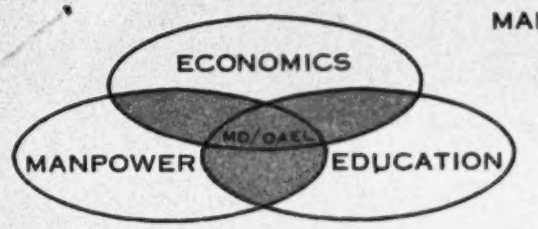

* Ten visuals were prepared to illustrate major themes in the course. These visuals appear (in original or modified form) at the end of 29 lessons.

# APPENDICES III thru XI

# APPENDIX III

## MANPOWER ECONOMICS TEST OF UNDERSTANDING

The "Manpower Economics Test of Understanding" (METU), reproduced on the following pages, is a 40-item multiple choice test designed to measure student understanding of concepts, relationships, and facts related to manpower, work, and the economic process. The purpose of the test is to measure knowledge and understanding. It is not intended to record or reflect attitudes or value judgments.






# MANPOWER ECONOMICS:

# TEST OF UNDERSTANDING

OU-CFEE/METOU, Revised Ohio Form, 7/67

CENTER FOR ECONOMIC EDUCATION / College of Business Administration Ohio University Athens, Ohio 45701

# MANPOWER ECONOMICS: TEST OF UNDERSTANDING

**MULTIPLE CHOICE:** Read the question carefully, then choose the **ONE** best answer and blacken the space on the answer sheet that corresponds to the best answer. Try to answer every question, even if you aren't sure you know the correct answer.

1. The main economic effect of technological change and automation over the past 35 years has been to:
   A. double the average rate of unemployment.
   B. increase production costs per unit of output.
   C. raise the productivity of workers.
   D. reduce the total earnings of workers.

2. The number of workers in the civilian labor force in the United States is about:
   A. 75 thousand.
   B. 750 thousand.
   C. 75 million.
   D. 1.2 billion.

3. Studies by sociologists show that in the United States a person's social status is:
   A. entirely unrelated to his job.
   B. very closely related to his job.
   C. related to his job only in small towns.
   D. related to his job only in large cities.

4. Occupational skills that are likely to be **most** useful and valuable to a worker (over the next 20 or 30 years) are:
   A. skills that are highly specialized to a particular job.
   B. general communications skills such as reading, writing, and working with other people, that can be transferred to different kinds of jobs.
   C. such practical skills as knowing how to operate a drill press or lathe or a hair-drying machine in a beauty shop.
   D. skills in using standard calculating equipment to solve routine problems in business finance.

5. Income **per-person** in Ohio (if we divided the **total** income received by all persons in Ohio by the total number of men, women, and children who live in the state) currently is about:
   A. $500 per year.
   B. $1000 per year.
   C. $3000 per year.
   D. $6000 per year.

6. Which of the following jobs is usually performed by a **technician**?
   A. Doing original research in nuclear physics at a university laboratory.
   B. Tightening bolts on an automobile as it moves down the assembly line.
   C. Correcting a worker who has made errors on his production line job.
   D. Checking blood specimens in a hospital for signs of disease.

7. The maximum amount of goods and services that a nation can produce in any one year is set by:
   A. its total supply of natural resources, including land and mineral deposits.
   B. the amount of money people have to spend.
   C. regulations and controls determined by the government.
   D. the level of technology and the quantity and quality of manpower and nonhuman resources available.

8. In general, what is the effect of <u>more</u> years of schooling on the lifetime earnings that an individual can expect?
   A. Earnings will be much lower because of income not earned while still in school.
   B. Total earnings will be about the same, regardless of how much schooling a person has.
   C. Earnings will be higher for people with more schooling.
   D. Total lifetime earnings will be somewhat higher for people who go directly to work when they reach age 16 than for those who spend one or two years in college.

9. In a basically private-enterprise market economy, such as the U. S. economic system, who generally has the <u>most</u> influence in determining what goods and services will be produced?
   A. Consumers.
   B. Federal government officials.
   C. The Chamber of Commerce.
   D. Labor unions.

10. If you were a recent high school graduate (or dropout) and wanted help in finding a job, which one of the following agencies would generally be the <u>best</u> place to go?
   A. Regional office of the U. S. Department of Labor.
   B. Nearest Job Corps Training Center.
   C. Chamber of Commerce in your city.
   D. Ohio State Employment Service.

11. Between 1965 and 1975 employment in the nation will probably <u>increase</u> most in which one of the <u>following</u> industries?
   A. Wholesale and retail trade.
   B. Manufacturing.
   C. Agriculture.
   D. Mining.

12. Annual "Gross National Product" is a measure of the:
   A. quantity of goods and services sold during the year by private business firms.
   B. part of total production which is purchased by the federal government.
   C. value of a nation's total output of goods and services.
   D. income received by all persons, before taking out taxes.

13. According to behavioral science studies, which one of the following workers is likely to have the <u>most</u> self-respect and feeling of personal worth?
   A. Herman Jones, a man who is continuously successful on his job.
   B. "Hoop" Thompson, a former junior college basketball star who now works on a car wash line.
   C. Miss Veronica Green, 30-year-old secretary in a typing pool, who was selected Homecoming Queen in her senior year of high school.
   D. John Andrews, who gets the highest salary.

14. The term "economic resources" is defined by economists to include:
    A. shares of stock in a corporation.
    B. everything that can be used in production.
    C. profits and dividends.
    D. labor, money, advertising, and capital.

15. Industrial studies show that <u>low</u> worker morale on an assembly line is <u>most likely</u> to result when the:
    A. workers go to different churches.
    B. foreman insists that each man follow the company policy of wearing his safety helmet.
    C. workers all belong to the same union.
    D. foreman doesn't allow workers to talk to one another.

16. Which of the following jobs usually <u>requires</u> the most years of training?
    A. Automobile assembly-line worker.
    B. Department store sales clerk.
    C. Waitress.
    D. Journeyman plumber.

17. The total lifetime earnings (from age 18 to 64) of male high school graduates <u>exceed</u> the lifetime earnings of high school dropouts by approximately:
    A. $4,600.
    B. $35,000.
    C. $247,000.
    D. no difference.

18. The "opportunity cost" of a new public high school is the:
    A. other economic goods that must be given up in order to get the school.
    B. increase in taxes that people have to pay.
    C. cost of constructing the school now as opposed to the cost of building the new school at a later date.
    D. profits that can be earned on the project by the construction company.

19. The <u>total</u> number of job opportunities available in 1975 will be <u>greatest</u> for:
    A. coal miners.
    B. elementary school teachers.
    C. journeyman electricians.
    D. airline stewardesses.

20. The money that is used to pay the costs of building and operating public schools comes <u>mainly</u> from:
    A. tuition and special fees and charges paid by parents of school children.
    B. the federal government.
    C. property taxes paid by home-owners and business in the local community, plus funds from the state government.
    D. payments from the state government based on the needs of individual pupils enrolled in the schools.

21. The primary goal of labor unions in the United States historically has been to:
    A. get higher wages, shorter hours and improved working conditions for their members.
    B. establish a separate political party to gain control over the national government.
    C. overthrow the basic institutions of capitalism and replace them with socialism.
    D. call strikes and set up picket lines.

22. The percentage rate of return on total resources invested in education (not average yearly earnings) is highest for completion of which level of education?
    A. Completion of the eighth year of school.
    B. Completion of the senior year of high school.
    C. Completion of one year of college.
    D. Completion of the fourth year of college.

23. The basic problems that face every economic system, including the American economy, are:
    A. how to increase profits, how to eliminate poverty, and what jobs to assign to men and women 18 years and older.
    B. what goods and services to produce, how much to produce, and how to distribute the nation's income among the various members of the society.
    C. how to increase the supply of money, deciding the kinds of goods and services to produce, and guaranteeing that every worker receives equal earnings.
    D. preventing government from interfering in the economy, producing the largest possible volume of goods and services, preserving the rights of property.

24. Wages of American workers are high chiefly because:
    A. the government sets wage rates.
    B. the productivity of the American worker is high.
    C. employers believe they have a social responsibility to pay high wages.
    D. most workers belong to strong labor unions.

25. Which procedures would most likely be used by a person who wanted to follow the "steps in sound economic reasoning" to decide on a plan for preventing inflation?
    A. Identify the problem, decide on a solution, see how this will affect your own economic self-interest, think of policies that other people might suggest, and then find arguments against the other solutions.
    B. Define the problem, identify appropriate goals, consider alternative possible solutions, study the probable effects of the different solutions, and choose the best solution in terms of your stated goals.
    C. Identify the goals, study the problems, consider alternative solutions, pick the best solution, and prepare arguments to defend your choice.
    D. Define the goals, identify the key facts, decide on the best policy, study the most likely results of using that policy, and stick to your choice against all criticism.

26. By 1970, women will make up what proportion of the civilian labor force in Ohio?
    A. About one-tenth.
    B. About one-fifth.
    C. About one-third.
    D. A little over one-half.

27. The term "labor productivity' is defined by economists to mean the:
    A. total quantity of goods and services that workers produce.
    B. average number of hours in the work week.
    C. total output of goods and services divided by total number of man-hours worked.
    D. quantity of goods that workers can produce without the aid of machinery and equipment.

28. The level of unemployment for the nation generally is greater when:
    A. there is rapid inflation.
    B. total spending on goods and services in the economy is too high.
    C. total spending on goods and services in the economy is too low.
    D. the nation is at war.

29. According to studies of the attitudes that American workers have toward their jobs, which one of the following statements is least supported by the findings?
    A. Workers feel that their jobs do influence their choice of friends and social life.
    B. Workers consider the amount of pay to be by far the most important factor in their job.
    C. Workers feel that the reason they are paid is because they are making a contribution to production.
    D. Workers feel that their job affects their whole style of life.

30. Automation appeals to many employers because it promises to:
    A. decrease the variety of goods produced.
    B. increase the number of job opportunities for workers.
    C. increase the tax revenues of state and local government.
    D. increase profits by lowering production costs.

31. Which one of the following is the best explanation or illustration of "real income"?
    A. Actual number of dollars that a worker earns from his job.
    B. Wage-and-salary income after payment of federal income taxes.
    C. The quantity of goods and services that a person can purchase with the dollars he earns.
    D. The standard of living that a family gets used to.

32. Education that increases the knowledge and skills of workers, will usually lead to:
    A. higher costs of production.
    B. greater production per man-hour worked.
    C. higher prices for goods and services.
    D. an increase in the supply of unskilled workers.

33. Forecasts of the amount of leisure time that will be available to workers by 1975 indicate that leisure time will:
    A. decrease a great deal.
    B. decrease slightly.
    C. stay about the same.
    D. increase slightly.

34. Many people would argue that school teachers are far more valuable to the economy than major league baseball players. Yet, many ball players are paid more than teachers. Which of the following is the best explanation for the differences in salaries between the two groups?
A. Ball players are really entertainers rather than producers.
B. The job of a major league ball player requires more college education than teaching requires.
C. There are fewer major league ball players than teachers.
D. Major league ball players are scarcer relative to the demand for their services than are teachers.

35. Mr. J. C. Sharp, a college-educated business executive, worked as a garbage man for a month as an experiment. He decided that he would not like the job on a permanent basis even if it paid more than his executive salary. According to psychologists, which one of the following reasons would best explain why he would not find the work satisfying?
A. He does not have any employees to boss around.
B. Collecting garbage does not challenge him to make use of his special abilities, training, and experience.
C. He had to take his thirty-minute lunch break when the driver of the garbage truck told him to eat.
D. Some people throw broken glass in the garbage and this is dangerous for the garbage collectors.

36. The number of years of schooling that the average (median) American worker has completed is:
A. 6 years.
B. 8 years.
C. 10 years.
D. 12 years.

37. The demand for carpenters is most likely to increase when:
A. incomes of potential home buyers rise.
B. costs of home construction increase.
C. the unemployment rate goes up.
D. the price of lumber increases.

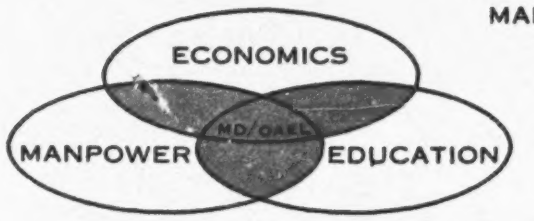
38. Some economic activities yield benefits that go almost entirely to a single individual, such as a haircut you purchase from a barber. In other cases, society-as-a-whole benefits from an activity, such as maintaining a strong military force for national defense. Which one of the following is the best illustration of a benefit that goes to society-as-a-whole rather than just to a particular individual?
A. As a result of taking a high school course in auto mechanics, you are able to repair your own car.
B. After graduating from college last June, you are hired to teach first grade at Pleasant Hill School.
C. Free public schools make it possible for you to improve your general communications and arithmetic skills.
D. You increase your chances of getting a higher salary by taking a course in shorthand.

39. Which one of the following combinations of characteristics would probably <u>increase</u> the number of full-time job opportunities available to you?
A. One year of college, having general job skills, no employment experience, will not move out of city to get a job.
B. High school graduate, trained as a tool and die maker, with employment experience, willingness to move out of state to get a job.
C. High school graduate, skilled as a farm equipment operator, no employment experience, will not move out of the STATE TO GET A JOB.
D. Elementary school graduate, possession of general job skills, employment experience, will move to a nearby city to get a job.

40. Look at the (imaginary) statistics in the table, and pick the year when the Slobovian economy came closest to achieving the goals of <u>full</u> employment, <u>growth</u> in output, and <u>stable</u> prices.

| Year | Gross National Product (billions of dollars) | Labor force (millions) | Employment (millions) | Consumer Price Index |
|---|---|---|---|---|
| 1951 | 305.4 | 62.1 | 54.7 | 114.0 |
| 1952 | 306.2 | 63.2 | 53.1 | 117.4 |
| 1953 | 320.1 | 64.3 | 62.8 | 118.1 |
| 1954 | 333.6 | 66.7 | 63.7 | 123.4 |

A. 1951.
B. 1952.
C. 1953.
D. 1954.




## APPENDIX IV

# SURVEY OF

# manpower + economic

# ATTITUDES

The statements on the next four pages of this questionnaire are expressions of attitudes or feelings about a wide variety of topics.

For each of the statements, you are asked to tell whether you Strongly Agree, Agree, Disagree, or Strongly Disagree. If you have no particular feeling about the statement or do not understand the statement, mark Undecided.

This is not a test. There are no right or wrong answers. Your responses will not affect your grades in any way. We want you to indicate your personal opinions about these topics.

Please mark your responses on the separate answer sheet by blackening the space under the letter that corresponds to your response. Please do not write on this test booklet. Please notice that the numbers on the answer sheet read from left to right across the page.

| Responses | | | | |
|---|---|---|---|---|
| Strongly Agree | Agree | Undecided | DISagree | Strongly DISagree |
| A | B | C | D | E |

**Statements**

1. Workers with more schooling deserve higher wages than workers with less schooling.
2. What is good for American workers is good for the American economy.
3. Labor unions deserve credit for improving the life of the working man.
4. Employers would rather hire older people (over 35) than younger people (under 20).
5. A good reason for quitting a job is that you don't like the people you work with.
6. Too much spending by the federal government is the main cause of inflation.
7. A more equal distribution of income than we presently have would be a good thing for America.
8. A married worker with a family should be paid more than a single worker even if both do exactly the same job.
9. Actually, whatever success I have in my work career depends pretty much on factors beyond my control.
10. The sharp reduction in number of people working on farms during the past 20 years is something for the American people to be happy about.

---

| Responses | | | | |
|---|---|---|---|---|
| Strongly Agree | Agree | Undecided | DISagree | Strongly DISagree |
| A | B | C | D | E |

Remember, blacken the space under "A" if you Strongly Agree with the statement, "B" if you Agree, and so forth.

---

11. If a person plans his education and training carefully, he is almost sure to succeed in his job career.
12. Most employers are sincerely interested in the welfare of their workers.
13. Automation is good for America and ought to be encouraged.
14. Labor unions are too strong today.
15. If someone gave me all the money I needed, I'd never go to work.

| Responses | | | | |
|---|---|---|---|---|
| Strongly Agree | Agree | Undecided | DISagree | Strongly DISagree |
| A | B | C | D | E |

Statements

16. You can't get a job as a carpenter, plumber, or electrician unless you have "connections" with a labor union.
17. The government should guarantee everyone in the country a decent standard of living.
18. Our country's economic progress is due mainly to the free enterprise system.
19. I wouldn't care what my job was like, as long as the pay was high.
20. The farmer is the person who contributes most to our economic well-being.
21. Business should be controlled and regulated by government to protect the interests of the consumer.
22. All honest work is worthwhile, and therefore all workers deserve respect.
23. Work is a necessary evil.
24. Most American workers are paid just about what they deserve.
25. You can't believe government statistics.
26. The business man is the person who contributes the most to our economic well-being.
27. It's too early to start thinking about my life's work.
28. It will be hard for me to find a good job.
29. The federal government should guarantee everyone a job.
30. Labor unions keep the employer from taking advantage of the worker.
31. Most people who are unemployed are shiftless and lazy.
32. The only reason most people work is for the money.
33. "Taking it easy" on the job is all right as long as you don't get caught by the boss.
34. The proper objective of all economic activity should be to satisfy the wants of consumers.
35. Government employees generally aren't as efficient and hard-working as people who work for private business.

| Responses | | | | |
|---|---|---|---|---|
| Strongly Agree | Agree | Undecided | DISagree | Strongly DISagree |
| A | B | C | D | E |

Statements

36. Luck will play an important role in determining whether I get a good job.

37. Federal government activities in our economic system should be kept to a minimum.

38. High profits are necessary for the survival of our economic system.

39. Labor unions are the main cause of inflation.

40. The major cause of inflation is high profits of business.

41. Poverty will always be a serious problem for millions of families in the U. S.

42. Good working conditions on the job are more important than high pay.

43. Taxes are too high in the United States.

44. The worker is the person who contributes most to our economic well-being.

45. Public schools in Ohio communities generally have enough money to provide a good education for all children.

---

| Responses | | | | |
|---|---|---|---|---|
| Strongly Agree | Agree | Undecided | DISagree | Strongly DISagree |
| A | B | C | D | E |

Remember, blacken the space under "E" if you Strongly Disagree, and under "A" if you Strongly Agree.

---

46. Men ought to get higher pay than women even if both do exactly the same work.

47. Workers today don't take much pride in their work.

48. The main purpose of our economic system should be to satisfy the needs and wants of the American people.

49. Married women with children under 15 should not hold a job.

50. People who really want to work can always find a job.

51. A worker who is a college graduate ought to be paid at least twice as much as a high school graduate.

| Responses | | | | |
|---|---|---|---|---|
| Strongly Agree | Agree | Undecided | DISagree | Strongly DISagree |
| A | B | C | D | E |

Statements

52. I think my chances of getting a good job will be a lot better than my father had.

53. Young people need a lot more help in finding jobs than they are getting now.

54. The best jobs go to people who have connections and "pull."

55. Women ought to be able to rise just as high in the world as men.

56. Industry today should give special preference in hiring and promotion to negro workers over white workers to make up for past discrimination.

57. I'll need a high school diploma in order to get a good job.

58. The government's national debt is getting so big that our country is in danger of going bankrupt.

59. The Ohio State Employment Service could probably help me find a good job.

60. Industry should hire high school graduates rather than dropouts.

61. Government economists contribute more to the economic well-being of our country than businessmen do.

62. An understanding of economics would be very helpful to junior high school students in planning their careers.

#

OUcfee/smea/1967-5

APPENDIX V

SUPPLEMENTARY EVALUATION PROCEDURES

This appendix contains four documents:

1. "Summing Up: The Student Talks Back"
   (Questionnaire distributed to students enrolled in the experimental MD/OAEL course on the final day of class.)

2. EVALUATION OF MD/OAEL COURSE"
   (Questionnaire distributed to teachers and other school officials involved in the experimental course, at the end of the semester.)

3. "Pupil Personnel Information Form"
   (Record of information on all students who participated in the experiment as members of instructional groups or as members of control groups.)

4. "MD/OAEL VISITATION RECORD"
   (Form used as checklist and record of personal interviews that the project investigators had with teachers and other school officials involved in the experimental project.)

## Summing Up: The Student Talks Back

In this course you have been encouraged to think for yourself and to accept responsibility for your own decisions and actions. During this class period the staff of the Center for Economic Education, Ohio University, is asking for your help in evaluating the lessons and overall plan of the experimental manpower economics course you are now completing. The information you give will be used to improve the course for students who will take it in the future. The way you fill out this evaluation form will not affect your grade in the course. Please be thoughtful, frank, and honest in your evaluation. Try to answer all the questions. Your teacher will be glad to answer questions that you may have about any of the items. You will have the entire period to fill out the evaluation form.

* * * * * * * * * *

To start your evaluation, please put all of the lessons in front of you so you can look at them if necessary. Remember, we want you to answer these questions by giving your own personal reactions. Don't give answers because you think they're the opinions of your teacher, or other students. We only want to know what you think about the course.

* * *

**A.** Please answer the following questions by writing Yes or No in the blanks.

___ 1. Did you enjoy the class discussions and learn a lot from them?

___ 2. Did you like being able to make notes and write on the lessons?

___ 3. Were the charts and tables in the lessons usually too difficult for you to understand?

___ 4. Did this course cause you to take a careful look at yourself and what you want to do with your life?

___ 5. Did the course make you want to study and learn more about the topics that were discussed?

___ 6. Did you like the drawings and sketches in the lessons?

___ 7. Would you have preferred having the lessons in a textbook rather than in loose-leaf form?

* * *

**B.** Check (✓) the one answer which is closest to your opinion.

1. Compared to other courses I am taking, the teacher's help in this course was:
   ___ more important than in other classes.
   ___ less important than in other classes.
   ___ about equally important

2. How often did you talk with ypur parents about the ideas and information in these lessons?
   ___ Often
   ___ Only a few times
   ___ Never

3. My parents' reactions to what I have been learning in the course have generally been
   ___ favorable
   ___ unfavorable
   ___ no reaction

4. The type of lesson I liked <u>best</u> were those which were basically:
   ___ written information and explanations
   ___ case studies
   ___ charts and tables

5. The type of lesson I liked <u>least</u> were those which were mainly:
   ___ written information and explanations
   ___ case studies
   ___ charts and tables

6. How did you find the language (vocabulary level) used in the lessons?
   ___ Too easy
   ___ About right
   ___ Too difficult

* * *

C. Please answer the following questions in the space provided.

1. Which <u>three</u> <u>lessons</u> did you like best? Why?
   #____ Because_____
   #____ Because_____
   #____ Because_____

2. Which <u>three</u> <u>lessons</u> did you <u>dislike</u> the most? Why?
   #____ Because_____
   #____ Because_____
   #____ Because_____

3. What two things did you like <u>most</u> about the course?
   --

   --

4. What two things did you <u>dislike</u> <u>most</u> about the course?
   --

   --

5. What two things that you learned from the course are most worthwhile?
--

--

6. Do you think this course will influence your future education. your career, and your life in general? How?

D. Please check (✓) your rating of this experimental course.

1. Compared with other courses I have taken, I would give this course an OVERALL RATING of: ____Outstanding ____Above Average ____Average ____Below Average ____Poor.

2. Compared with other courses I have taken, my INTEREST in this course has been ____Outstanding(High) ____Above Average ____Average ____Below Average ____Very Low.

3. Compared with other courses I have taken, the amount that I LEARNED is ____A Great Deal ____Above Average ____Average ____Below Average ____Very Little.

4. Compared with other courses I have taken, the DIFFICULTY I had with this course was ____Great ____Above Average ____Average ____Below Average ____Almost None.

5. Compared with other courses I have taken, the VALUE of this course for my FUTURE decisions and actions is ____Outstanding ____Above Average ____Average ____Below Average ____Very Little.

E. Are there any additional comments you would like to make about the course? (Use back of page 1 if you need more space) --

Please fill in the following information:

Date_____ City_____ School_____

Grade_____ Teacher_____ Period____ Check: Male____ Female__

#

OHIO UNIVERSITY
*Center for Economic Education*
COPELAND HALL
ATHENS, OHIO 45701

January 1968

(EVALUATION OF MD/OAEL COURSE")

During the past five months your school has participated in the field-testing of a new, experimental course in economic and manpower education ("Manpower Development: Opportunities in American Economic Life"). In the final lesson of the course, your students were given an opportunity to express their reactions to the course. (A copy of the student evaluation lesson is attached.)

Now, we would appreciate having your thoughtful, frank, and honest evaluation of the course as it was offered in your school. The information you give us will be used to improve the course for the future. The reactions you express on the evaluation forms will be known only to the staff of the Center. We will not quote you or publicly identify any of the views you express without your prior approval.

We have enclosed two evaluation forms which we would like you to fill out. The first form -- "Evaluation of MD/OAEL Course" -- is self-explanatory. The second is lesson #70 -- "Summing Up: The Student Talks Back". On the latter form we would like for you to record what you think would be the "ideal" responses of your students. In other words, in your judgement as an educator, what reactions should your students express. E.g., referring to Section A, #1 in the "Summing Up" evaluation form, do you feel that the students should have enjoyed the class discussions and learned a lot from them? If you find it awkward to respond to particular questions from the viewpoint of the student's best interests, simply skip the question.

Please return the forms in the enclosed addressed envelope. We deeply appreciate your cooperation in this important part of our project.

Phillip E. Powell
Research Associate

Robert L. Darcy
Director

## EVALUATION OF MD/OAEL COURSE

1. Compared to other courses that you offer in your school system, how valuable is this course for your students?

* * *

2. What types of students do you think benefited most from this course (e.g., average, below average, academic oriented, vocationally oriented)? Why?

* * *

3. What effect do you think this course is going to have on the <u>lives</u> of your students (e.g., their understanding, values, attitudes, and actions)? Please indicate any actual changes you may have observed in the behavior of students enrolled in the course (such as fewer absences, greater interest in school work, more use of library, conversations with teachers, counselors, principals).

* * *

4. What <u>problems</u> did the course create for <u>you</u> during the semester?

* * *

5. What did you <u>like</u> <u>most</u> about the course? Why?

* * *

6. What did you <u>dislike</u> most about the course? Why?

* * *

7. What <u>specifically</u> can we do to <u>improve</u> the course?

* * *

8. Are there any additional comments you would like to make about the course? (Use back of page if necessary.)

* * *

Please fill in the following information:

Name_____ Date_____ City_____

School_____ Check: ____ Teacher
____ Counselor
____ Administrator

How much of the student lessons and teacher materials did you read? (Check)

___ less than 1/3
___ about half
___ about 3/4
___ all

#

CENTER FOR ECONOMIC EDUCATION, College of Business Administration, OHIO UNIVERSITY, Athens, Ohio 45701

Pupil Personnel Information Form
Fall Semester, 1967-68

☐ Instructional Group
☐ Control Group

(For staff use only; not to be filled out by students.)

A. IDENTIFYING DATA:

Name:_____; Sex:_____; Social Security No.:_____

Date of Birth:_____; Race:_____; Grade Level:_____

Address:_____
Street Number Street City Zip Code

School Building:_____

Teacher:_____; Period:_____

B. HOME AND FAMILY BACKGROUND:

| | Age | Social Security Number |
|---|---|---|
| Father's Name:_____ | _____ | _____ |
| Mother's Name:_____ | _____ | _____ |
| Guardian's Name:_____ | _____ | _____ |

This child lives with (check one):
a) Both parents _____
b) Father only _____
c) Mother only _____
d) Other (state relationship) _____

If other than (a), please explain: (e.g., parents separated or divorced, father deceased, mother deceased, etc.).

Number of siblings living in household: _____

Parent's Address (if different from pupil's):_____

_____

Education (highest grade completed): Of father _____
Of mother _____
Of guardian _____

Code:

A. less than eight
B. elementary school diploma
C. nine
D. ten
E. eleven
F. high school diploma
G. some college
H. college degree
I. advanced degree (Professional, Master's, Doctor's)

Occupation: Of father _____
Of mother _____
Of guardian _____

Code:

W. White-collar workers.
W-1 Professional and Technical
W-2 Managers, Officials, and Proprieters
W-3 Clerical workers
W-4 Sales workers

B. Blue-collar workers
B-1 Craftsmen, foremen
B-2 Operatives
B-3 Nonfarm laborers

S. Service workers
S-1 Private household workers
S-2 Service workers, except private households

F. Farm workers
F-1 Farmers & farm managers
F-2 Farm laborers & foremen

Annual Family-Income Level in 1966:

___(a) Under $4,000
___(b) $4,000-$6,000
___(c) $6,000-$10,000
___(d) Over $10,000

Was this income typical for the family (i.e., same level for 1967, 1965, and 1964?).

Yes ☐ No ☐ If no, indicate which code category and year _____

_____

C. SCHOLASTIC RECORD (Cumulative Point Average):

(a) Junior High School ____
(b) Intermediate Grades 4, 5, 6 ____
Name of Elementary School _____

D. TEST RECORD:

| Names of Tests | Forms of Tests | Percentile Rank | Test Norms Used |
|---|---|---|---|
| Intelligence Tests: | | | |
| Achievement Tests: | | | |
| MD/OAEL Test Scores: | | | |
| Attitude Pre-test | | | |
| Attitude Post-test | | | |
| Understanding Pre-test | | | |
| Understanding Post-test | | | |

Other Evaluation:

Date form was completed: _____
Completed by: _____

CENTER FOR ECONOMIC EDUCATION
College of Business Administration

Ohio University
Athens, Ohio 45701

## MD/OAEL VISITATION RECORD

Date _____. CFEE staff member _____.

Person, school, city _____.

Student lesson being taught #_____.

Student Lessons (content, style, additional material, quality of production, errors, delivery):

Teacher Supplementary Materials (content and style):

Pupil Personnel Form:
How many filled out? _____ Percent of total _____.
Problems

Teacher's library (use, value, gaps):

Testing:

Successful teaching techniques and materials:

Relations with counselor, principal, and coordinator. (Are they informed? Conferences, classroom visitations, materials):

Community activities:
Reactions

Outside speakers or audio visuals

* * *

General problems and comments: administrative, lessons, and others:

Services desired from CFEE:

Materials to be distributed:

Coordination needed:

Date and class period of my next visitation _____.

# APPENDIX VI

## RESPONSES TO EVALUATION QUESTIONNAIRES

This appendix contains two documents, both of which are tabulations of responses given to evaluation questionnaires completed at the end of the one-semester experimental MD/OAEL course.

Appendix VI-1 is entitled "STUDENT EVALUATION OF EXPERIMENTAL MD/OAEL COURSE", and consists of five parts (A-E). Because Part D is the most generalized and basic, it is listed first. (Appendix V, above, includes a copy of "Summing Up: The Student Talks Back", which is the questionnaire that was used).

Appendix VI-2 is entitled "SUMMARY OF RESPONSES BY TEACHERS AND PROFESSIONAL SCHOOL STAFF EVALUATING MD/OAEL COURSE". (Appendix V, above, includes a copy of a letter from the Ohio University Center for Economic Education dated January 1968, with attached questionnaire entitled "Evaluation of MD/OAEL Course").

APPENDIX VI-1

STUDENT EVALUATION OF EXPERIMENTAL MD/OAEL COURSE[1]

(Part D -- 8th grade)

| EVALUATION STATEMENT | "Outstanding" (Highest Rating) | | "Above Average" | | "Average" | | "Below Average" | | "Poor" (Lowest Rating) | | EVALUATION INDEX[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | |
| 1. "Compared with other courses I have taken, I would give this course an OVERALL RATING of: | 80 | 15 | 166 | 32 | 205 | 39 | 52 | 10 | 19 | 4 | 3.5 |
| 2. "Compared with other courses I have taken, my INTEREST in this course has been: | 64 | 12 | 133 | 25 | 202 | 39 | 78 | 15 | 46 | 9 | 1.6 |
| 3. "Compared with other courses I have taken, the amount that I LEARNED is: | 152 | 29 | 124 | 24 | 169 | 32 | 42 | 8 | 34 | 7 | 3.6 |
| 4. "Compared with other courses I have taken, the DIFFICULTY I had with this course was: | 50 | 10 | 82 | 16 | 149 | 29 | 107 | 21 | 131 | 25 | .6[3] |
| 5. "Compared with other courses I have taken, the VALUE of this course for my FUTURE decisions and actions is: | 157 | 30 | 190 | 37 | 121 | 23 | 25 | 5 | 26 | 5 | 6.8 |

[1]Written multiple choice responses of 523 eighth grade students in six junior high schools at Lancaster and Zanesville, Ohio.

[2]Ratio of above-average responses (e.g. "Outstanding" + "Above Average") to below-average responses (e.g. "Below Average + "Poor").

[3]Means that 6/10 as many students rated the course above average in difficulty as those who rated it below average in difficulty.

APPENDIX VI-1 (cont.)

## STUDENT EVALUATION OF EXPERIMENTAL MD/OAEL COURSE[1]

(Part D -- 9th & 10th grades)

| EVALUATION STATEMENT | Grade | "Outstanding" (Highest Rating) | | "Above Average" | | "Average" | | "Below Average" | | "Poor" (Lowest Rating) | | EVALUATION INDEX[2] | No. of Students |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | % | No. | % | No. | % | No. | % | No. | % | | |
| 1. "Compared with other courses I have taken, I would give this course an OVERALL RATING of: | 9th | 2 | 2 | 34 | 41 | 42 | 50 | 4 | 5 | 2 | 2 | 6.0 | N=85 |
| | 10th | 10 | 24 | 23 | 55 | 8 | 19 | 1 | 2 | 0 | 0 | 33.0 | N=42 |
| 2. "Compared with other courses I have taken, my INTEREST in this course has been: | 9th | 9 | 11 | 21 | 25 | 43 | 50 | 8 | 9 | 4 | 5 | 2.5 | |
| | 10th | 9 | 21 | 18 | 43 | 13 | 31 | 0 | 0 | 2 | 5 | 13.5 | |
| 3. "Compared with other courses I have taken, the amount that I LEARNED is: | 9th | 18 | 21 | 23 | 27 | 31 | 36 | 9 | 11 | 4 | 5 | 3.2 | |
| | 10th | 15 | 36 | 14 | 33 | 12 | 29 | 1 | 2 | 0 | 0 | 29.0 | |
| 4. "Compared with other courses I have taken, the DIFFICULTY I had with this course was: | 9th | 7 | 8 | 6 | 7 | 28 | 33 | 27 | 32 | 17 | 20 | .3 | |
| | 10th | 2 | 5 | 1 | 2 | 12 | 29 | 8 | 19 | 19 | 45 | .1[3] | |
| 5. "Compared with other courses I have taken, the VALUE of this course for my FUTURE decisions and actions is: | 9th | 20 | 24 | 31 | 37 | 28 | 33 | 2 | 2 | 3 | 4 | 10.0 | |
| | 10th | 11 | 26 | 16 | 38 | 13 | 31 | 0 | 0 | 2 | 5 | 13.5 | |

[1] Written multiple choice responses of 85 ninth grade students (enrolled in "General Business" course) in one junior high school at Columbus, Ohio and 42 tenth grade students ("potential dropouts") in one high school at Lancaster, Ohio.

[2] Ratio of above-average responses (e.g. "Outstanding" + "Above Average") to below-average responses (e.g. "Below Average + "Poor").

[3] Means that 1/10 as many students rated the course above average in difficulty as those who rated it below average in difficulty.

APPENDIX VI-1 (cont.)

## STUDENT EVALUATION OF EXPERIMENTAL MD/OAEL COURSE [1]

(Tabulation of Responses to Section A of "Summing Up: The Student Talks Back")

| EVALUATION STATEMENT | GRADE | DISTRIBUTION OF RESPONSES (%) | |
|---|---|---|---|
| | | "Yes" | "No" |
| A-1. "Did you enjoy the class discussions and learn a lot from them? | 8th | 80% | 20% |
| | 9th | 87 | 13 |
| | 10th | 100 | 0 |
| A-2. "Did you like being able to make notes and write on the lessons? | 8th | 78% | 22% |
| | 9th | 67 | 33 |
| | 10th | 76 | 24 |
| A-3. "Were the charts and tables in the lessons usually too difficult for you to understand? | 8th | 34% | 66% |
| | 9th | 27 | 73 |
| | 10th | 14 | 86 |
| A-4. "Did this course cause you to take a careful look at yourself and what you want to do with your life? | 8th | 83% | 17% |
| | 9th | 83 | 17 |
| | 10th | 91 | 9 |
| A-5. "Did the course make you want to study and learn more about the topics that were discussed? | 8th | 53% | 47% |
| | 9th | 40 | 60 |
| | 10th | 76 | 24 |
| A-6. "Did you like the drawings and sketches in the lessons? | 8th | 88% | 12% |
| | 9th | 79 | 21 |
| | 10th | 89 | 11 |
| A-7. "Would you have preferred having the lessons in a textbook rather than in a loose-leaf form? | 8th | 41% | 59% |
| | 9th | 50 | 50 |
| | 10th | 24 | 76 |

[1] Written responses of 523 eighth grade, 84 ninth grade, and 46 tenth grade student

APPENDIX VI-1 (cont.)

## STUDENT EVALUATION OF EXPERIMENTAL MD/OAEL COURSE

(Tabulation of Student Responses to Section B of "Summing Up: The Student Talks Back")

| EVALUATION STATEMENT | ALTERNATIVE ANSWERS | DISTRIBUTION OF RESPONSES (%) | | |
|---|---|---|---|---|
| | | 10th GRADE (N=42) | 9th GRADE (N=85) | 8th GRADE (N=523) |
| B-1. "Compared to other courses I am taking, the teacher's help in this course was: | "more important" | 49% | 29% | 42% |
| | "less important" | 4 | 10 | 9 |
| | "about equally important" | 47 | 61 | 49 |
| B-2. "How often did you talk with your parents about the ideas and information in these lessons? | "often" | 24% | 13% | 27% |
| | "only a few times" | 56 | 68 | 60 |
| | "never" | 20 | 19 | 13 |
| B-3. "My parents' reactions to what I have been learning in the course have generally been: | "favorable" | 73% | 63% | 62% |
| | "unfavorable" | 2 | 4 | 6 |
| | "no reaction" | 20 | 33 | 32 |
| B-4. "The type of lesson I liked <u>best</u> were those which were basically: | "written information and explanations" | 28% | 9% | 11% |
| | "case studies" | 52 | 87 | 78 |
| | "charts and tables" | 20 | 4 | 11 |
| B-5. "The type of lesson I liked <u>least</u> were those which were mainly: | "written information and explanations" | 46% | 45% | 42% |
| | "case studies" | 15 | 5 | 3 |
| | "charts and tables" | 39 | 50 | 50 |
| B-6. "How did you find the language (vocabulary level) used in the lessons? | "too easy" | 2% | 4% | 3% |
| | "about right" | 96 | 70 | 75 |
| | "too difficult" | 2 | 26 | 22 |

## STUDENT EVALUATION OF EXPERIMENTAL MD/OAEL COURSE

(Selected Student Responses to Questions in Parts C and E of "Summing Up")[1]

Question #C-1: Which three lessons did you like BEST? Why?

Selected Responses:

(The following lessons were chosen most frequently by the students. The numbers after the lesson titles indicate the number of times the lesson was picked by students as one of the three "Best". The letters following the numbers in each entry refer to the basic type of lesson that is represented. The code is: C--case study, I & E--information and explanation, and D--data. For example, "Are Today's Skills Good Enough for Tomorrow's Jobs?" is a case study. Note that there was not an overwhelming consensus; even the most popular lessons were listed by fewer than 20 per cent of the respondents.)

1. Are Today's Skills Good Enough for Tomorrow's Jobs? (113) (C)
2. An Affair of the Heart (106) (C)
3. What Is Economics All About? (105) (I & E)
4. Housewife or Career Girl? (100) (I & E, C)
5. How Do I Find a Job? (92) (I & E, C)
6. The Work That People Do (76) (C)
7. Is There Reason and Justice in the Work Place? (72) (C)
8. Work: Test Site of Human Relations (62) (C)
9. Will It Take a Good Education to Get Tomorrow's Jobs? (49) (D)
10. Aspiration and Achievement (49) (I & E)

---

1/ Responses of approximately 575 eighth-grade students, 80 ninth graders, and 45 tenth graders.

Question #C-2: Which three lessons did you DISLIKE the most? Why?

Selected Responses:

(The following lessons were chosen most often by the students. For explanation on items in parentheses, see note under C-1 above.)

1. Where the Jobs Are in Ohio (now called "A Case Study: Where the Jobs Are in Ohio") (55) (D)

2. An Exercise in Economic Reasoning: Review Lesson (47)

3. Collective Bargaining (45) (I & E)

4. The Economic World and Work: A Review Lesson (40)

5. What Is Economics All About? (38) (I & E)

6. Will It Take A Good Education to Get Tomorrow's Jobs? (38) (D)

7. The Circular Flow of Economic Activity (37) (I & E)

8. An Affair of the Heart (37) (C)

9. Portrait of the Unemployed (37) (D)

10. Men and Women Without Jobs (37) (I & E, D)

Question #C-3: What two things did you like MOST about the course?

Selected Responses:

(The responses to this question covered a wide range of subjects and finding definite patterns is difficult. The answer most frequently given was "teacher". The criterion used for selecting the responses included in the list was that of being reasonably representative and/or interesting.)

1. I liked it because it is helping me to know what to expect in the future and how to plan my future. (2D, girl)[2]

2. We haven't had anything like this before and it was a change. (2B, girl)

---

[2] City and school identification code for respondents (applies to all the remaining questions): 1A--Columbus, Clinton Jr. High; 2A--Lancaster High School; 2B--Lancaster, Thomas Ewing Jr. High; 2C--Lancaster, Stanbery Jr. High; 2D--Lancaster, Sherman Jr. High; 3A--Zanesville, Grover Cleveland Jr. High; 3B--Zanesville, Theodore Roosevelt Jr. High; 3C--Zanesville, Hancock Jr. High.

3. You can tell it was not written by somebody who's been dead sixty years. (2B, boy)

4. It tells the facts in life that are so important to a person. (2D, girl)

5. ...it showed what you were becoming. (3A, boy)

6. I liked my teacher. (3B, girl)

7. Discussions. (3A, boy)

8. You get to talk in class about it. (3A, boy)

9. The questions we answered. (2C, boy)

10. You could tell how much you had learned by answering the questions in the book. (3B, girl)

11. The actual cases about people. (1A, boy)

12. Hardly any homework. (2D, boy)

13. I liked the "Today's Lesson in Brief". It puts the whole lesson into a few words. (3B, girl)

Question #C-4: What two things did you DISLIKE most about the course?

Selected Responses:

(Definite patterns of responses to this question were difficult to establish. The list includes a variety of representative responses made by the students.)

1. It got boring sometimes. (2D, boy)

2. Sometimes there were too many facts. (3C, girl)

3. The tables and charts. (2B, boy)

4. I didn't like some things I didn't understand. (2A, boy)

5. Vocabulary was too difficult. (3B, girl)

6. Notebooks (for keeping daily lessons) were too bulky. (1A, girl)

7. The teacher. (1A, boy)

8. I didn't dislike anything about it. (2A, girl)

9. Some of the lessons were terrible because they repeated what had been said in the lessons before. (2B, girl)

10. I don't like the tests too well because sometimes the questions are hard to understand. (3C, girl)

11. When we had to do homework. (2D, boy)

12. Reading the lessons. (3A, girl)

13. You mentioned the colored (negro) workers too many times. (3B, girl)

14. The class lasted only a semester. (3A, girl)

Question #C-5: What two things that you learned from the course are most WORTHWHILE?

Selected Responses:

(Approximately two-thirds of the students who answered this question indicated: "get a good education", "stay in school", "need a good education to get a good job", etc. Two other subjects were mentioned often enough to be identified: "learned about jobs", "how to get a job", etc. and "planning for the future", "decision-making", etc. Other themes were listed less frequently; fewer than 10% of the students mentioned the remaining leading themes: "jobs", "planning", and "decision-making". The criterion used for selecting the responses included in the list was that of being representative and/or interesting.)

1. I learned how much education I need to make it. (2A, boy)

2. Finding out how important an education really is. (3A, girl)

3. That education is more important than I thought it was. (3C, boy)

4. It helps get off on the right foot. You stay in school you'll have a better chance to get a job. (3C, boy)

5. The longer you stay in school the better job you'll get. (1A, girl)

6. How to plan your future. (3B, boy)

7. How to find a job. (2D, boy)

8. How to choose a job. (2D, girl)

9. People's dreams don't always come true. (3B, boy)

10. There are more things in life than just money. (1A, girl)

11. Economics is more than the price of eggs. (2B, boy)

Question #C-6: Do you think this course will influence your future education, your career, and your life in general? How?

Selected Responses:

("Yes" answers were five times more prevalent than "no" answers. Representativeness and interesting nature of comment were the criterion used for selecting which responses to include.)

1. Yes, it sort of wants me to make something out of myself. (3A, girl)

2. I understand things I never heard of before. (1A, girl)

3. Yes, by letting me know what to expect. (2A, boy)

4. Yes, it has given me a better outlook on life. (1A, girl)

5. It's helpful in showing what I need as an adult. (2B, boy)

6. No, I want to be a model. (2A, girl)

7. Yes, because now I know what I'm working for. (2A, boy)

8. Yes. Helped me get higher values. (2B, girl)

9. Yes. It taught me to get the best out of life that I can. (2C, girl)

10. I have benefited from this type of course more than any other. (1A, girl)

11. Yes. It will make me plan my career carefully. (2B, boy)

12. Yes, help me understand the economy. (3C, boy)

13. No ... we aren't quite old enough to take it seriously. (2B, girl)

14. Maybe. I might think back and look before I leap. (2B, boy)

15. This course is very important for our future. It makes us realize what we have to start planning for now. (2B, boy)

16. Yes. Helps you figure what field of work you would like to enter and what it will be like. (2B, boy)

17. It has stimulated me to get a better job and make something of myself. (2A, boy)

18. It will influence my life because now I know how important it is to get a good education, to get a skill that will be needed in the future labor force. (2B, girl)

19. Yes. Because I was going to quit school when I was 16 years old. But since taking this course I'll stay on. (2C, girl)

20. Not very much ... I doubt if I'll change any of my future plans much. (2B, boy)

21. Yes. When I stop to think it makes you feel like you're more responsible than you thought before. (3A, girl)

22. Yes, because it has increased my education, made me think of my career more, and I have learned a lot about how much I count in the world. (3A, girl)

23. Yes. It makes me realize that we need well educated people. And that if we drop out and have trouble keeping a job, most likely our children will have the same problem. And so will their children. (3A, girl)

24. Yes. Because it showed me how things would happen if I did something wrong. And if I did something right what would happen. (3C, boy)

25. Yes, well now I've got more economic education and can figure this thing out more. (3C, boy)

**Question #E:** Are there any additional comments you would like to make about the course?

**Selected Responses:**

(Responses were selected for this list on the basis of how representative and interesting they appeared to be. Less than half of the students wrote additional comments. More than three-fourths of these comments were positive or complementary rather than negative or critical.)

1. I really enjoyed it. (2A, girl)

2. It stunk! (1A, boy)

3. I learned more in this because it is new and I like it. (2B, girl)

4. The course is very interesting and very valuable to me. (2C, boy)

5. I don't think it was a very worthwhile course. (2C, boy)

6. This is a very interesting course and it should be taught to everyone. (3C, boy)

7. I think it is good for us to take this course, and important also. But I don't think that eighth graders are mature enough to fully understand it. (2B, boy)

8. Yes. I hate to see it end. It is a good course. (3C, girl)

9. It was a fun course and I wish I could take it again. (3C, boy)

10. I thought it was very interesting to learn about more things that you never even heard of. (2D, girl)

11. I have learned a lot in Economics that is important for the future. (2C, boy)

12. History as History is over but Economics is and shall be. (2B, boy)

13. I think American History should be eliminated and economics put in for the whole year. (2C, girl)

14. I just didn't understand the course. (3B, girl)

15. I think the teacher must have been chosen with great care. Because without my teacher I'd be lost! (3A, girl)

16. I think this is a good idea to associate junior high students more with the inside problems and factors in our economy. (2B, boy)

17. I thought this course was very boring and uninteresting. (2B, girl)

18. It was really very helpful in many ways, it took the blindfold off of many of our faces. (2D, girl)

(End of Appendix VI-1)

## SUMMARY OF RESPONSES BY TEACHERS AND PROFESSIONAL SCHOOL STAFF EVALUATING MD/OAEL COURSE[1]

**Question #1:** Compared to other courses that you offer in your school system, how valuable is this course for your students?

**Selected Responses:**[2]

1. This is an important area of life which in the past has not received proper emphasis in the curriculum. Some of the information has been included in other subjects but not in the effective manner as presented in this course. This is information which pupils should receive and begin considering at an early age, eighth grade, for example. The course has a definite place in the curriculum. (3C)

2. This course can be of great practical value.... (2B)

3. This course serves as a warning to the student that what lies ahead is not all fun and games. (2A)

4. I feel that this was one of the best courses which is offered in our Junior High system. (2A)

5. A course in Economics has great importance to young people. I believe it could become an important part of our curriculum. (2A)

6. It was a most valuable course. A curriculum offering such as this course should be offered in each school system. (2C)

7. The real value of the course is that it is flexible and can be readily adjusted to meet the needs of particular individuals. (3A)

8. Very valuable, not so much in basic subject matter, but in the opportunities provided for self-evaluation. (3A)

9. Though the student may not realize the immediate value of the course, as he continues his education he should be better prepared, as a result of this course, to make vocational and education decisions. (3A)

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[1] Comments written on standard evaluation form ("Evaluation of MD/OAEL Course", see Appendix V) by eight teachers, three guidance counselors, and nine administrators (project coordinators and principals) involved in field-testing course. The code used to identify the respondent is: 1--Columbus, 2--Lancaster, 3--Zanesville, A--teacher, B--guidance counselor, C--administrator.

[2] Responses reported here were selected on the basis of how representative and interesting they appeared to be.

10. Considering the type of student (10th grade potential dropouts) which I am working with this year, I consider this course very valuable. (2A)

11. Economics course does add the following valuable assets to the curriculum:
    1. Students <u>felt</u> the course was important and therefore were more willing to work.
    2. Students were able to see <u>practical</u> application for the material which is extremely important to students.
    3. The course could easily be related to other courses. The students could use things learned in Math, English, Science and other classes in studying economics. The Econ could also be used in other classes. (2A)

12. Average to above average. (2C)

13. Would be a valuable course to any junior high school student. (1B)

<u>Question #2</u>: What types of students do you think benefited most from the course (e.g., average, below average, academic oriented, vocationally oriented)? Why?

<u>Selected Responses</u>:

1. I feel they <u>all</u> benefited. (1B)

2. The average, below average and vocationally oriented students enjoyed and benefited from this course the most. (3A)

3. I feel that all students benefited to some degree but the average and above-average students gained the most.... (2B)

4. ...I would have to say that the above average or academic oriented students benefited the least. (2A)

5. All types benefited, especially in attitude changes, but specifically the below average and vocationally-oriented since they could relate in the economic discussion without feeling the social stigma.

6. The potential "dropout", I believe, would best be served by this course. (1C)

7. ...over the long run I feel sure that average and below average people will realize that they learned more in this course that will be of meaning to them than in most other subjects. (3C)

8. It would be my opinion that the academic oriented learned most from the course because this group generally does learn the most of whatever is offered. I would think, too, that the average and below average students and those vocationally oriented ... learned more from this course in a semester than is usually learned in the same time by these students in other courses. (3C)

9. I think all students benefited from the course, but those in the below average sections benefited most. The reason for this, I believe, was that the below average students could finally see some relevance to what they were learning. Also the slow student could discuss his ideas in class and feel fairly secure of his arguments because he can point to specific instances in his environment and argue from his own experiences. (2A)

Question #3: What effect do you think this course is going to have on the lives of your students (e.g., their understanding, values, attitudes, and actions)? Please indicate any actual changes you may have observed in the behavior of students enrolled in the course (such as fewer absences, greater interest in school work, more use of library, conversations with teachers, counselors, principals).

Selected Responses:

1. As one of my slower students said, "It makes me want to stay in school." (3A)

2. Some students, for the first time, have thought about what they might want to do after high school. (3A)

3. Most of the students I feel now at least have given thought to what lies ahead of them and their future. (2A)

4. Many of the students indicated they could better understand economic discussions with their parents and elders. (2B)

5. One of the greatest effects I believe is that many of the students found an interest at home concerning these ideas. (3C)

6. I have witnessed a change in attitude and understanding in many of the students. Awareness, understanding of one's self, and planning of goals of these students enrolled in this course have been attained to a degree. (2A)

7. It seems to me that the course will affect the lives of students very much. Here was a whole area of information applicable to their lives of which they were only dimly aware. Now they are conversant with the vocabulary and the principles which they would not have encountered for several years, and,in many cases, never. (3C)

8. I think that this course definitely had an effect upon the economic understanding of most of my students. They seem to now better realize how the American Economic system functions. They seem also, already, to have gained some idea of their importance within this system. I think that this course has instilled within them the ambition to be more selective about their career. (2A)

9. ...in my estimation most of the students did develop an awareness of society's future expectations from them. They did seem to develop an understanding for the need of furthering their education, and a realization that the carefree life they were now enjoying was eventually destined to end and they would then be expected to work to support themselves. (3A)

10. In many students there was a marked improvement in attitudes toward school in general. I observed many changes in specific attitudes such as: from "school's boring" to "why would he drop out, that's dumb". Since the course has been completed I have noted a real enthusiasm for American History which is unusual in its extent. (2A)

Question #4: What problems did the course create for you during the semester?

Selected Responses:

1. Enthusiasm problem with slower students. They were unable to read and understand simple vocabulary and sometimes became "bored". (3A)

2. One problem which developed was that of motivating the slower sections to read the lessons at home. (2A)

3. ...the course was introduced and taught for a semester with a minimum of difficulty. (3C)

4. Many times I lacked one basic definition for a term. A glossary of terms and definitions is essential. (2A)

5. Deciding what type of a test to give over different material. (I used essay, objective, and combinations of both types of tests.) (2A)

6. Another problem was the fact that toward the end of the course (the last 10 or 15 lessons) the lessons were not as interesting to the students. They considered this material dull. (3A)

7. Near the end of the course I felt too much "tie up" time was taken: too much review. The lack of new materials was boring to some of the students who felt a little slighted that they learned no more than they did the last week or so. (2A)

Question #5: What did you like most about the course? Why?

Selected Responses:

1. The information presented is vitally needed for students in preparation for their adult lives. (1A)

2. One of the outstanding features of the course was its easy application to the every day world. The students could readily see its application to many current situations.... (3A)

3. It gives us an area in our school program to devote completely to these ideas. It has only been related materials up to now. (3C)

4. ...most of the case studies did much to bring out the meaningfulness of the course. They kept up the student interest. (2A)

5. Case studies could be said to be <u>actual</u> -- there's nothing worse than "phoney" examples to our eighth graders. (2A)

6. ...the spaces where students can write and become directly involved (with materials and ideas) ... (3A)

7. I feel the lessons with many questions, especially opinion questions, made the students <u>think</u> and <u>reason</u>. (2A)

8. I think that I liked most the use of the short series of questions following a section. These questions usually did a tremendous job of explaining the important points of the lessons. (2A)

9. The subject material was new, something the students never had before, and I feel the students enjoyed this. (3A)

10. The practical application which nearly all lessons followed in basic pattern. This practical application permitted the lower ability students to get "involved" in many of the class discussions. (2C)

11. I also like the idea of <u>not</u> having a "textbook". (3C)

12. Individual daily lessons rather than "textbook". (2A)

13. Notebook approach (looseleaf lessons) with students being able to take notes and write on each lesson. (2A)

14. Once material was handed out they became the property of the student. (3A)

15. The freedom of expression and ability to deal with "tough" economic facts of life. (3C)

16. The well defined purposes and goals. The students were made aware of the purposes of the course and could categorize the lessons (e.g.) "Today we're going to study the importance of education". (2A)

17. It attempted to show the students the value of an education to them. The importance of getting as much education as possible. (2C)

18. ...getting Social Security cards for each student illustrates to the students the seriousness of the course. (3A)

19. I enjoyed the two opportunities to teach this class. Both times, the lessons were case studies and the class discussions were excellent. (2B)

20. Many of the lessons included group guidance topics that should assist the students to understand themselves and their environment. This will help me in our group guidance program. (2B)

21. The most enjoyable part was the section on basic economics. And the students were more interested in it. (3A)

22. All work is honorable and all working classes are essential. This course helped the students to see why, in a concrete and realistic way. (2B)

Question #6: What did you dislike most about the course? Why?

Selected Responses:

1. I felt the vocabulary was too difficult for the lower ability students. (2B)

2. Several students mentioned too many facts were crammed into some of the lessons. (2B)

3. I felt some of the lessons were too long, or could have been of simplier construction. (2A)

4. Difficult tables and graphs for student understanding. (2A)

5. I think many of the illustrations could have been more local in nature. (2A)

6. Lack of motivational gimmicks. (1C)

7. Lack of opportunities for students to demonstrate their problem solving abilities. (1C)

8. The manpower phase of the course. I felt it was repetitious with too many graphs depicting too much varying information. ...in too many cases two different types of statistics were used in different places to prove the same point. I realize this gives them good experience if they can understand the switch, but too many couldn't and simply became confused. (3A)

9. The materials are somewhat difficult in terms of vocabulary. (3C)

Question #7: What specifically can we do to improve the course?

Selected Responses:

1. Some work and attention needs to be given to improving the vocabulary. (2C)

2. Spread the course over a one year period rather than one semester. (2B)

3. Have within the lessons some suggestions for workable major projects for student (scrap book of Economic news, student survey of attitudes, etc.). (2A)

4. Keep the illustrations in the material extremely simple and easy for student understanding. (2A)

5. Provide more activities for the students. (1C)

6. The inclusion of more case studies might add greater interest in the course. (2B)

7. Provide motivational gimmicks which will motivate the student to read the materials. The student should feel a <u>need</u> to be informed on the content provided. (1C)

8. A more comprehensive list of free movie films. (3A)

9. Use more visual aids, tapes, and plan time for community resources. (3C)

10. Provide transparencies which could be used on an overhead projector to illustrate the graphs and additional material to supplement the lessons. (2A)

11. Provide tests -- to give the teacher better direction in evaluation. (3A)

12. The vocabulary should be written on a lower level or at three different tracks or levels. (2B)

13. ...spend more time describing the courses available in high school that should help the student prepare for his post high school activity, whether it be a job or college. Many students had only a vague idea about the high school curriculum and had not thought about their high school program. (3A)

14. Do not change the format of presenting statistics in different lessons to prove similar facts. (3A)

15. Develop more interesting lessons in the manpower phase. (3A)

16. ...interject two or three light stimulating lessons toward the end of the course (last 10 or 15 lessons). (3A)

<u>Question #8</u>: Are there any additional comments you would like to make about the course?

<u>Selected Responses</u>:

1. The material made it possible to conduct discussions in which even the slowest students could make some contribution. (3A)

2. My students knew there was no such thing as a "free lunch" and now they began to understand <u>why</u>. (3A)

(End of Appendix VI-2)

APPENDIX VII

DISSEMINATION AND PUBLIC INFORMATION

List of Dissemination and Public Information Activities by Types of Media[1]

I. NEWSPAPER ARTICLES AND TELEVISION

"Dorm Loan, 2 Aid Grants Approved", The Messenger, May 25, 1966, Athens, Ohio, p. 1ff.

"Junior Highs to Offer Economic Education", The Times Recorder, Zanesville, Ohio, May 16, 1967, p. 1, section B.*[2]

"Four Teachers Here Get Fellowships", The Times Recorder, Zanesville, Ohio, May 24, 1967, p. 1, section B.

"Economic Classes for Junior Highs Planned", The Lancaster Eagle-Gazette, Lancaster, Ohio, June 3, 1967, p. 2.

"City Schools to Have Five at Institute", The Lancaster Eagle-Gazette, Lancaster, Ohio, June 14, 1967, p. 2.

"Clinton Teachers at Ohio University", The Linden-Northeast News, Columbus, Ohio, July 6, 1967.

"At Pre-School Workshop", The Times Recorder, Zanesville, Ohio, September 1, 1967, p. 1, section B.

"Nation's Business Leaders Watch Economic Experiment", Mardo Williams, The Dispatch, Columbus, Ohio, February 18, 1967, p. 45A.

"Spotlight on Education". A 15-minute live interview with Robert L. Darcy on Manpower Development: Opportunities in American Economic Life, September 20, 1967, 7:15 a.m., WBNS-TV, Columbus, Ohio.

"Educators Battle Economic Illiteracy", Mardo Williams, The Dispatch, Columbus, Ohio, May 24, 1968.

"Manpower and Economic Education". A half-hour video-tape panel interview, Arkansas Educational Television Commission, June 26, 1968, 8:30 p.m., KETS, Conway, Arkansas.*

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[1] Presented in chronological order.

[2] Asterisks indicate that reprint is included at the end of this appendix.

## II. PROFESSIONAL MEETINGS AND JOURNALS

"Manpower Education in a Changing Economy", Robert L. Darcy. Unpublished paper presented at the Zanesville School Workshop, August 31, 1967, Zanesville High School, Zanesville, Ohio, 3 pp.

"Research Visibility, Bibliography", American Vocational Journal, Vol. 42, No. 6 (September, 1967) p. 47. (Notice of project, chief investigator, and university affiliation.)

"Manpower Education in a Changing Economy", Robert L. Darcy. Paper presented at the 61st Annual Vocational Convention of The American Vocational Association, December 6, 1967, Sheraton Cleveland Hotel, Cleveland, Ohio. Mimeographed 7 pp. (This paper is scheduled for publication in the American Vocational Journal, fall 1968.)

"The Future of Economic Education: Focus on the Income-Earning Role", Robert L. Darcy. Unpublished paper presented at the 12th Annual Meeting of the Ohio Council for The Social Studies, April 27, 1968, Christopher Inn, Columbus, Ohio, 2 pp.

"A New Bridge to Span the School-to-Work Gap", Phillip E. Powell. Mimeographed. Unpublished paper presented at the 12th Annual Meeting of the Ohio Council for The Social Studies, April 27, 1968, Christopher Inn, Columbus, Ohio, 6 pp.

"How A Curriculum Project Can Be Correlated to a Summer Institute: A Case Example". Presentation by Robert L. Darcy to NDEA Directors Institute in Economic Education, March 25, 1968, Ohio University, Athens, Ohio.

"Manpower and Economic Education: A New Program for the Schools". Presentation by Robert L. Darcy to Conference of Curriculum Supervisors, Arkansas Schools, Arkansas State Council on Economic Education, May 17, 1968, Little Rock, Arkansas.

"The Role of the Economist in Economic Education -- As Developer of Teaching Materials". Presentation by Robert L. Darcy to Colloqium on the Role of Economists in Economic Education, Connecticut Council for the Advancement of Economic Education, June 12, 1968, Norwich Inn, Norwich, Connecticut.

## III. OTHER

"Ohio Center at Work on New Study", Newsletter, Joint Council on Economic Education, New York, February 1967, p. 8.

"Manpower Development: Opportuniites in American Economic Life". Address by Robert L. Darcy to Muskingum Area Rotary Club, August 15, 1967, Zanesville, Ohio.

"Experimental Course Taught in Eight Schools", Economic Notes, Ohio Council on Economic Education, Athens, Ohio, Fall 1967, p. 6.

"Ohio Junior High Students Analyze 1970 Job Market", Newsletter, Joint Council on Economic Education, New York, January 1968, p. 2.

"Ohio Schools Test Manpower Course", Economic Notes, Ohio Council on Economic Education, Athens, Ohio, Winter 1968, p. 2.

"Economic Education: Pilot Project Course Materials Ready in Ohio", Newsletter, Department of Education, State of Ohio, Columbus, Ohio, February 1968, p. 2.

"New Course Reveals Roles in Life", Appalachian Advance, Appalachia Educational Laboratory, Charleston, West Virginia, March 1968, p. 8ff.

"JCEE Fills Another Gap -- Publishes Course in Manpower and Economic Education", Special News Notes, mimeographed, Joint Council on Economic Education, New York, April 1, 1968, 1 p.*

"Special Pre-Publication Offer to Centers, Councils, DEEP School Systems, 50% Discount on Orders of 10 or More Copies", Promotional flyer, Joint Council on Economic Education, New York, May 1968, 1 p.

"Students Use Economics Analysis to Chart Future Job Prospects", Public Information release, Joint Council on Economic Education, New York, May 1968, 3 pp.

"Manpower & Economic Education: A New Bridge to Span An Old Gap", Robert L. Darcy and Phillip E. Powell, Ohio Guidance News & Views, May/June, 1968, Division of Guidance and Testing, Ohio State Department of Education, Columbus, Ohio, pp. 14-15.

Promotional Letter on Manpower & Economic Education, Interstate Printers and Publishers, Danville, Illinois, June 1968, 2 pp.

Manpower Education in a Growing Economy, Robert L. Darcy and Phillip E. Powell. Monograph summarizing MD/OAEL project. Scheduled for publication August 1968, about 48 pp.

* * * * *

EXAMINATION COPIES of Manpower & Economic Education and the Teacher Manual were sent on a complimentary basis to approximately 350 individuals and organizations in the schools, universities, government agencies, business, labor unions, and other fields. These copies were provided free of charge by The Interstate Printers and Publishers, Inc., and the Joint Council on Economic Education. The distribution list included all of the State and Local Councils on Economic Education and University Centers for Economic Education affiliated with the Joint Council on Economic Education. The Joint Council's "Special News Notes" (see P. A-51 below) and public information release were sent to more than 1,000 interested parties.

THE TIMES RECORDER, ZANESVILLE, OHIO

TUESDAY, MAY 16, 1967

Section B, p. 1

# Junior Highs To Offer Economics Education

Zanesville's three junior high schools have been selected to participate in a new educational program aimed at giving young people a better understanding of the economic system and occupational opportunities in the 1970s and beyond, it was announced yesterday.

The annuoncement was made jointly by Zanesville School Superintendent Wallace E. Blake and Dr. Robert L. Darcy, director of the Ohio University Center for Economic Education. Dr. Darcy's Athens staff is developing the program under sponsorship of the U.S. Office of Education.

A new one-semester course for eighth graders will begin in the three junior high schools next September. The course will give the youngsters an introduction to the American economy and sweeping changes which are taking place in the manpower field. Half the students will enroll in the fall semester, and the other half will take the course during the second semester.

The course will include information about occupational opportunities and the operation of the manpower market including the roles of business, labor and government.

Emphasis will be placed on information and ideas useful in career planning, the economic and non-economic dimensions of work, and the economic value of education to the individual and the community.

Assistant Zanesville School Superintendent Ralph Storts will coordinate the program for the school system, and the junior high principals, John Brammer, Lawrence Crist and Delbert C. Young, will serve on the planning committee for the new course.

Blake said the new course is part of an overall program to prepare for operation of the Muskingum Area Joint Vocational School and Technical Center which will be built at Chandlersville and Richards roads.

Blake said "we feel that an important responsibility of our schools is to prepare young people for effective participation in economic life, and this course should help do that."

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FROM: ARKANSAS EDUCATIONAL TELEVISION COMMISSION

FOR RELEASE: AT WILL

SUBJECT: MANPOWER AND ECONOMIC EDUCATION

AIR DATE: WEDNESDAY, JUNE 26, 8:30 p.m.

"Manpower and Economic Education", a half-hour advance overview of a new instructional series to be offered on Channel 2 this fall, will be broadcast on KETS Wednesday, June 26, at 8:30 p.m.

The instructional course is designed to be used by students from the eighth through the twelfth grades. There will be 75 lessons in the series, each 20 minutes in length. One lesson will be shown daily, with repeats.

The series is designed to help prepare junior and senior high school students for effective participation in economic life. The main body of the lessons includes economic concepts, statistical data and questions about the role of economic activity -- especially work -- in the life of men and women.

Host for this preview program will be Fred H. Schmutz, program director for Channel 2. Guests will include Dr. Robert L. Darcy, Phillip E. Powell, Dr. Bessie Moore and John Fortenberry.

Dr. Darcy, co-author of the textbook "Manpower & Economic Education", is currently director of the Center for Economic Education and associate professor of economics at Ohio University. In September of this year, he is to join the faculty of Colorado State University as professor of economics.

Phillip E. Powell, co-author of "Manpower & Economic Education', is a manpower research specialist in the Center for Economic Education and was recently named associate director of the Center.

Dr. Bessie Moore is coordinator of economic education for the Arkansas State Educational Department.

John Fortenberry, assistant superintendent in charge of instruction for Little Rock Public Schools, is also chairman of the Curriculum Advisory Committee for Elementary and Secondary Schools for the Arkansas Educational Television Commission.

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(Editor's note: Effective July 1, 1968, Phillip E. Powell will be Director of the Center for Economic Education, Henderson State College, Arkadelphia, Arkansas, and will begin work as Television Teacher for a 75-lesson ETV series on "Manpower & Economic Education".)

OINT COUNCIL ON ECONOMIC EDUCATION

1212 AVENUE OF THE AMERICAS, NEW YORK, N. Y. 10036

...on-profit educational organization to encourage,
...rdinate, service and improve economic education

SPECIAL NEWS NOTES

April 1968

## JCEE FILLS ANOTHER GAP - PUBLISHES COURSE IN MANPOWER AND ECONOMIC EDUCATION

Manpower and Economic Education, with Teachers Guide, is the important outcome of a two-year experimental project to help schools improve the preparation of young people for effective participation in the changing economy and world of work. The project was carried out by one of the JCEE Centers, the Ohio University Center for Economic Education, under the direction of Dr. Robert L. Darcy and Mr. Phillip E. Powell. Permission to publish was granted JCEE to make the course widely available for regular school use.

Manpower and Economic Education is a one-semester course for junior-senior high school students. It was created by economists, educators, manpower specialists and vocational guidance counselors.

The course is based on two assumptions: (1) Our economy is changing rapidly and these changes will create both problems and opportunities for Americans in the 1970's and beyond; (2) Young people can do a better job of preparing for the future if they learn more about the economy, its changing technology, and the increasing importance human resources will have.

The course was field-tested during the fall semester, 1967-68, with a total enrollment of 750 eighth, ninth, and tenth grade students.

There are 70 separate lessons in the course, with each lesson planned to be treated in a single 40-minute class period.

Each lesson begins with an abstract outlining the central topic to be studied. Next comes the main body of the lesson, typically including questions to be answered by the student. Statistical data are provided in charts, tables, and the text to enable the student to reach his own conclusions based on relevant facts. At the close of each lesson is a summary paragraph which recapitulates and emphasizes the essential understandings that students should have gained from the lesson. Supplementary materials for the teacher for each lesson include a general statement about the lesson, suggested readings and reference sources, and answers to questions asked in the lessons.

MANPOWER AND ECONOMIC EDUCATION, by Robert L. Darcy and Phillip E. Powell
1968, 316 pages, $3.50

TEACHERS GUIDE TO MANPOWER AND ECONOMIC EDUCATION
1968, 128 pages, $1.50

A-51

M L Frankel

President

APPENDIX VIII

RESEARCH AND WRITING PROCEDURES

This appendix contains four documents:

1. "Transcribed Notes of a Planning Conference Held by the Professional Staff of the Manpower Project, September 9-10, 1966".

2. "CLASSIFICATION SYSTEM for INFORMATION and DATA, ECONOMIC EDUCATION/MANPOWER DEVELOPMENT PROJECT".

3. "Procedures for Preparation of Student Materials, MD/OAEL", staff memorandum dated April 7, 1967.

4. "Procedures for Preparing MD/OAEL Supplementary Materials and Suggestions for Teachers", staff memorandum dated April 19, 1967.

CENTER FOR ECONOMIC EDUCATION, OHIO UNIVERSITY, ATHENS, OHIO

Transcribed Notes of a Planning Conference
Held by the Professional Staff of the Manpower Project, September 9-10, 1966

Participants -- Harry Crewson (Economist), Phillip Powell (Research Associate), and Robert Darcy (Director).

* * *

FOR INTERNAL USE ONLY

We want to review the basic objectives of the Project and brainstorm regarding the content of the course and some of the procedures and methods that we want to use in designing and then in carrying it out. Let's refer to the June 29 Memorandum to Vice President Smith and just review the mechanics of the grant. Since the official starting date of July 1, 1966, Phill has worked full-time on the Project except for two weeks of Army Reserve duty in Washington. I've been assigned to the Project on a 2/3 time basis and Harry Crewson worked full-time for the ten day period from August 22 through 31.

We're interested today primarily in the content of the course and the research design. Testing for understanding and attitudes will be something we'll work on in the second semester, based on the content of the course that is developed this semester.

In discussing the students that this course will be aimed at, we are assuming that it will be a required course and probably taught as a part of the Social studies core, probably using Team Teaching; that is, a Social Studies teacher and a Vocational Guidance Counselor. We assume that there will be about 90 class meetings, 40 minutes in length; a total therefore of 60 clock hours in the course. Now this might be within a single semester, or it might be spread out over both semesters of the school year. But we will have this course as a required course, not an elective. We don't want to select particular kinds of students for the course. The students will be in the age range from 12 to 14, depending on whether this is a 7th, 8th, or 9th grade level,or even a mixture of the three. We do have to consider the motivation, the interest, and the ability of the teachers, the guidance counselors, and most important of all, the students. The course will be given during the 1967-68 school year.

In preparing the content of the course during this fall semester, there are several considerations to keep in mind. One is we will want a very broad base of material, sort of like the base of an iceberg. We want much more material prepared during this Fall than we will ever use in the actual classroom instruction. We want this broad base of understanding in the manpower area partly to assure ourselves that we have covered the area thoroughly and to give us a broad base from which to choose the most pertinent material, but also because we'll want to use part of this base of the iceberg for orienting the teachers and preparing the materials for the teachers of this course. And there are two or three other uses for this material. One is to report the subject matter of our project to fellow economists and educators. And finally, we can make use of much of this material in the NDEA Institute that we hope to conduct in the summer of 1967. Some of this material can also be very useful for stimulating interests and getting cooperation of the community by discussing the project with business and labor, and showing them that

economists know a good deal about the process of economic growth and manpower trends. And it is quite possible that there will be programs that are designed for the community to orient them; and we'll want to go a bit further in terms of level of sophistication in order to give these people a point of departure for the whole courses.

We want to emphasize why it is that economic understanding and a knowledge of the changing world of work is important to the students. This can be dramatized in a variety of ways: case studies, some of the anti-Utopian novels have dramatized the failures of individuals and entire cultures to make appropriate adjustments to changes in their physical economic environment. On the other hand there are success stories about adjustments and adaptations that have been made. But the point is, to motivate the student, we need to express and explain very clearly and dramatically why economic understanding and an understanding of changing manpower trends is important to the individual student. It's also extremely important to the student that he understand his economic environment so that he has a better understanding of himself and the society that he lives in.

Early in the course we want to emphasize the values of knowledge as power, emphasize the dignity and worth of the individual. And although we want to point out the difficulties and challenges of the depersonalization arising out of the changing and increasingly interdependent fabric of our economic life, we want to help build a stronger base within the individual student for a healthy self-image and a deeper sense of perspective and individual competence and worth in terms of the role he plays in society. We need to use concrete, specific illustrations of how knowledge has been used to improve the welfare of the individual and the group. The industrial revolution for example has increased productivity, increased real per capita income, has reduced the hours of work, has increased the range of economic freedom, improved the opportunities for education, better health, better housing, generally to enhance the quality of life for the individual.

Very early in the course, perhaps the first thing, would be an identification of occupations, classification of occupations in terms of what work is done, whether the number of jobs has increased or decreased, what work various members of the family do, whether students have thought even for a few minutes about what kinds of jobs they would like to have when they're finished with their regular schooling. Get them ego involved at the outset in identifying with a particular occupation, either for themselves or through their uncle or their parents or somebody they know. We might look at the kinds of jobs that were done by people in a community in the United States, say back in 1820 and contrast this with the kinds of jobs, occupations, that exist today. We might refer for example to the Help Wanted ads in the New York Times which list certain jobs, occupations, that almost defy understanding. This material on occupations, occupational classification or structure of the labor market can be regarded as a separate unit for research purposes. And the technique of the historical case studies can be used to show what jobs were like in the United States or a particular community in the United States in 1820; what jobs are like today in the United States and what we anticipate will be the occupations in say 1972 and ten years beyond 1972 -- the year when many of the students in this course will graduate from high school

and be entering the labor force.

In considering the content of the course, we know there will be many areas of economic theory and economic policy, that we'll only touch on. We won't for example describe in great detail the structure and the operation of the Federal Reserve system, although we may very well give the general rationale of monetary and fiscal policy. This cannot be a comprehensive course in principles of economics: we know that. We are aware of the need to prepare the teachers, to increase their confidence, as well as their competence. We will want to give them an orientation, whether this is by means of the NDEA summer institute or whether it's a special weeklong workshop before the Fall semester opens; we don't know yet. But there will be some teacher orientation. We'll also perhaps prepare a glossary of economic terms with references to pages in McConnell or some other text or readings that we might give them so that when questions come up in class -- if students want to know more about monetary policy for example -- the teacher can refer to some source, like McConnell, do a little reading, and answer the questions as time permits. But there's no expectation that we can present a comprehensive principles of economics course because there just isn't time. The teachers will not really be adequately prepared to do this, and as far as that goes, students couldn't absorb it anyway. We don't want to lose focus on the occupational-opportunities and world-of-work aspect of the course.

We will need to structure the whole course very carefully and perhaps develop a system of models like the circular flow and like the resources-technology-institutions interaction model and relate most of what we do in the course to just a small handful of simple models which illustrate processes and relationships. Pictorial representations and simple graphs and charts are extremely important and effective for students at the junior high level. A strong case can be made for using the traditional supply and demand framework for organizing our information data for an analysis of occupational opportunities and this also will help to clarify the thinking of students if they can use supply and demand tools. This can be done without ever drawing a demand curve or a supply curve. We could talk about changes, trends, without the need to use the conventional supply and demand graphic analysis which probably would be very confusing and very distracting.

It's important to focus on the individual's employment opportunities and raise questions about what will improve his opportunities. The individual fits into the labor market on the supply side and what he does by way of preparing himself for successful participation in the labor force is really expressed through the supply side of the market. This is how the individual influences the operation of the labor market. Racial prejudice can be used as a case study of malfunctioning of the labor market and the failure of our socio-economic institutions to adapt effectively with the result that we have economic waste and we also have the denial of occupational opportunities and income opportunities for the groups that are discriminated against.

In addition to the occupational opportunities unit and labor market processes, we need to explain the process of economic growth, including technological advance, automation, the knowledge explosion, the problems of

the failure of institutions to adjust. Another unit of study is the orientation to the structure and operation of the economic system. Another unit is the investment in human resources, importance of education to the individual, in terms of increasing his income and also the external benefits or social benefits that accrue to society through improved education, health, housing. Another unit will be done on the values and attitudes that relate to our economic institutions and the need for discussing the steps in economic reasoning and applying these steps to an analysis of one's values and one's occupational choice: the need to think through, examine one's own value judgments and commitments by using something like the five steps in economic reasoning.

We'll want to show the relationship between the individual and ideas and technological change and institutions, and the way institutions resist change and the way they eventually, though not inevitably, adjust to the pressures of technological change. There will be a need to relate the individual and his ideas to technology and institutions. It will be necessary to point out, perhaps by using a comparative case study approach, maybe with an Asian country as opposed to the United States, why institutions do change more quickly, adapt more readily in the United States economy than in some of the less-developed countries. Why is it that technology is able to move more quickly and institutions permit this technological change much more quickly in one culture than in another?

Education is a means to adaptation, successful adaptation, to these technological changes for the individual. And we have to stress that the individual must commit himself to continuing education in order to qualify himself for continuing success and for survival in the economic and social life of our country. Investment in human resources, and investment in education specifically, really is an investment in survival.

We'll plan to have from six to nine units and then be concerned about how we organize them and interrelate them later, but for present research and development purposes, we'll be thinking tentatively of having six to nine units. Each of these units will have study questions, review questions, audio-visual materials. There will be a guide for the teacher. There will be reading materials for the student. The units will be broken down into separate chapters and then we might think of having one chapter for each week of study, which would mean eighteen chapters with each unit containing about three chapters. But there may be variation among the units on this. In order to reassure the teachers and the administrators we'll want to organize the course very carefully in terms of these units and chapters, have a fairly strict time schedule so that the schools can see exactly how this can be presented, how the student can absorb this material on a scheduled basis in fairly small blocks. We might for example have as many as 27 chapters instead of just 18. We'll probably also prepare quizzes and tests which we can give to the teachers as suggested tests and this will reassure both the students and the teachers -- make them feel more secure about what they are learning and what they are accomplishing in the course.

It's important to discuss the personality characteristics and attitudes that are appropriate for particular occupations, too. It would be

interesting, for example, to have students discuss what they think would be the habits of thought and behavior that are appropriate for particular occupations. We need to be careful to point out that occupational success requires more than just technical skills. There are certain attitudes, certain values, styles that are absolutely essential for occupational success; and without these, successful participation in the labor force, at least in particular occupations, is just almost impossible. So values must play an important role in this particular course. To make this course really interesting and realistic, it will be desirable for the teacher early in the course to have students discuss the nature and meaning of work, leisure, how the philosophy of life fits in with their occupational plans or aspirations. The work-leisure dichotomy is no longer appropriate. In connection with this discussion it might be useful to talk about the guaranteed income proposal and to see what the student attitudes are on this.

Some major themes that keep coming up in the discussion and should be clearly identified and stressed are the themes of values, the process of change, the need for the individual to think about these things and make decisions that will influence very importantly, his future life.

An interesting question is -- How did the parents or uncles or friends of students get into the occupations that they're in? There are so many non-economic or non-income factors that lead them into these particular jobs. One thing that we want to be very certain about is that in the preparation of the materials for the course although the temptation will be great to include many economic and philosophical issues, we have to limit the course so that we don't attempt to do too much. We want to highlight a small number of major themes, concepts and teach these well. The major emphasis in the course will be to point out that students should be concerned not just with making a living, but with learning more about how to live, more about the quality of their lives. In this sense the course is as much a liberal-arts course as an occupational or a vocational course. The framework in which the student makes occupational decisions is determined very much by the values that he holds, by his attitudes, by his education, skills, and by of course the institutions of the society and his reactions to these institutions.

One of the concepts that the students might discuss along with work and leisure is success. Good material for this discussion would be the Horatio Alger stories, and it would be interesting to discuss who it is in the community that the students consider to be successful and why they feel that they are successful.

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# CLASSIFICATION SYSTEM for INFORMATION and DATA, ECONOMIC EDUCATION - MANPOWER DEVELOPMENT PROJECT

1. Analysis, Choice & Decision Making
(These materials are general in character, not concrete application to the world of work.)

1.a -- Knowledge as power

1.a.1 -- The knowledge explosion

1.a.2 -- Uses of knowledge
Adjustment to change (challenge-response, successful adaptation)
Example: education preparation, changing occupational opportunities, occupational mobility

1.b -- Steps in economic reasoning (methodology, scientific method, logical analysis, problem-solving, critical analysis, evaluation theory)

1.c -- Models and analytical tools

1.c.1 -- Opportunity cost

1.c.2 -- Supply and demand

1.c.3 -- Macroeconomic view

1.c.4 -- Microeconomic view

1.c.5 -- Comparative (cross-cultural) models

1.c.6 -- Other models

1.d -- Use of empirical data

1.d.1 -- Statistical measures and methods
Nature and computation
Projections and trends

1.d.2 -- Non-statistical data

1.e -- Public economic policy

1.f -- Citizen responsibilities and functions (at local, state, national levels)

2. World of Economics

2.a -- Institutions

2.a.1 -- Institutions & institutional change (adaptation)

2.a.2 -- The market mechanism

2.a.3 -- Capitalism (private enterprise system, the price system, etc.)

2.a.4 -- Business enterprise and profits (firm, plant, industry)

2.a.5 -- The corporation

2.a.6 -- Consumer households and decisions

2.a.7 -- Government: local, state, federal

2.a.8 -- Labor unions

2.a.9 -- Other economic institutions

2.b -- Resources (Factors of Production)

2.b.1 -- Labor (general concept only)
Note: for primary file on labor, manpower, human resources, see 3, 4, 5, 6.

2.b.2 -- Natural resources (land, conservation)

2.b.3 -- Capital goods

2.b.4 -- Entrepreneurship (enterprise, "management")

2.b.5 -- Production function (input-output)

2.b.6 -- Scarcity

2.b.7 -- Population

2.c -- Technology, Automation & Cybernation

2.c.1 -- Process of technological change, automation, and cybernation

2.c.2 -- Industry experience and projections

2.c.3 -- Disruption and change caused by technology and automation

2.d -- Relationships and processes

2.d.1 -- Resources - Technology - Institutions interaction model

2.d.2 -- Economic systems

2.d.3 -- Basic problems facing every system:
Overall level of economic activity (employment, production, income)
Composition of income
Distribution (sharing) of income

2.d.4 -- Circular flow of economic activity

2.d.5 -- Specialization and interdependence
Division of labor
Comparative advantage

2.d.6 -- Economic change: growth and instability

2.d.7 -- Investment process -- in capital goods and human resources

2.d.8 -- Innovation and product obsolescence

2.e -- Goals for the United States economy

2.e.1 -- Economic freedoms (occupational choice, consumer choice, free enterprise; relationship between freedom and choice)

2.e.2 -- Full production (full employment, efficient production)

2.e.3 -- Economic growth and reasonable price stability

2.e.4 -- Economic security (private and public programs; "guaranteed income" proposal)

2.e.5 -- Economic justice (equitable distribution of income)

2.f -- Specific economic problems

2.f.1 -- Poverty and income inequality

2.f.2 -- Social imbalance and investment imbalance

2.f.3 -- Instability and lagging economic growth

2.f.4 -- Other problems

3. <u>World of Work</u> (General considerations)

3.a -- Nature of work and leisure

3.b -- Ideology of the labor market and wages system
Changing attitudes and practices
Employer (management) - employee relations
"Cult of efficiency" (Taylor, Mayo)

3.c -- Monetary and "non-economic" rewards of work

3.c.1 -- Money income (earnings, wages and salaries)

3.c.2 -- "Real" income (effective purchasing power)

3.c.3 -- Income "in kind"

3.c.4 -- National and regional income statistics (Ohio incomes)

3.d -- Industrial system

3.d.1 -- Industrial Revolution

3.d.2 -- Factory system

3.d.3 -- Machine technology

3.d.4 -- Effects of technological change on the world of work
(Also see 2.c)

3.e -- Productivity

3.e.1 -- Meaning and measurement of productivity

3.e.2 -- Sources of productivity improvement

3.e.3 -- Relationship between productivity and earnings
For the individual worker
For entire plant, industry, economy

4. Labor Market Structure and Processes: Employment and Unemployment

4.a -- Labor market structure: supply and demand

4.a.1 -- Degree of organization (fully-structured, partially-structured, unstructured)

4.a.2 -- Aggregates

4.a.3 -- Micro, by sectors and individual markets

4.b -- Labor force concept and definition

4.c -- Statistical measures of labor force, employment, unemployment

4.d -- Occupational opportunities for men and women

4.d.1 -- Occupational classification by industry and skill-level

4.d.2 -- Occupational qualifications and specific skills
Communication skills
Computational skills
Manual dexterity
Group organization and relations skills

4.d.3 -- Occupational information and planning
Guidance
Vocational guidance and development
Jobs for men and women

4.d.4 -- Entry jobs

4.d.5 -- Occupational mobility (occupational ladder, advancement, promotion)
Vertical
Horizontal

4.d.6 -- Employment discrimination
Race
Religion
Sex
Nationality-ethnic

4.d.7 -- Creation of entirely new occupations

4.d.8 -- Self-employment

4.e -- Employment data by industry, occupation, and sex
Present
Past
Future: trends and projections to 1975-80 and beyond

4.f -- Job placement (employment procedures)

4.f.1 -- Applications, interviews, tests

4.f.2 -- Private employment agencies and service

4.f.3 -- Governmental employment services
U.S. Employment Service
Ohio Bureau of Unemployment Compensation
Other

4.f.4 -- Job-vacancy statistics

4.g -- On-the-job procedures and standards

4.g.1 -- Wages scales, working conditions, etc.

4.g.2 -- Personnel assessment (work review, performance evaluation)

4.g.3 -- Employer programs and employer-employee relations.

4.h -- Labor unions (trade unions, organized labor)

4.h.1 -- Purposes and functions of unions

4.h.2 -- Labor-management relations and collective bargaining

4.h.3 -- Union security ("right-to-work" laws, union shop)

4.i -- Unemployment, by type and cause

4.i.1 -- Voluntary and involuntary

4.i.2 -- Seasonal and frictional

4.i.3 -- Technological and structural

4.i.4 -- Inadequate demand (cyclical, secular)

4.i.5 -- By duration (short-term, temporary unemployment, long-term unemployment)

4.j -- Public and private programs re unemployment

4.j.1 -- Government unemployment insurance

4.j.2 -- Private programs of Supplementary Unemployment Benefits

4.k -- Labor mobility (geographical, social), including programs to increase mobility (for occupational mobility, see 4.d.5)

4.l -- Labor information, types, sources, and uses (Also see 4.f)

4.m -- On-the-job-training (OJT) and retraining programs

5. Psychology and Sociology of Work

5.a -- Work as "job", "occupation", "vocation", "career"

5.b -- Psychological factors: focus on the individual worker (Roe, Super)

5.b.1 -- General psychological needs (drives) of the individual:
Relate to non-psychological
Maslow's concepts of man's needs
New experience
Security
Personal response
Social recognition
"Instinct of workmanship"(Veblen)

5.b.2 -- Identity
Confidence
Dignity
Individual worth
Maturity
Personal integrity
Self-image
Self-respect
Models (father, uncle, "successful businessman")

5.b.3 -- Personal development
Achievement
Advancement
Ambition
Aspiration and aspiration levels
Confidence
Expectations
Goals
Life-adjustment
Motivation (incentive)
Roles
Self-realization and self-actualization
Occupational satisfaction and psychological makeup
Ascensionism

5.b.4 -- Attitudes and orientation toward interpersonal relations in work, environment and society (work as a source of psychological satisfaction)
Attitudes toward work and workplace
Outer-directed/Inner-directed/Traditionally directed (Riesman)
Object-oriented vs. person-oriented (Weller)
Authority
Individualism
Productive vs. consumption orientation (Fromm)

5.b.5 -- Value themes and value thinking (philosophy of life)
Meaning and importance of values
Methods of value analysis (Scriven, Ayres)
Interests (avocations, etc.)
Leisure
Tastes
Success (meaning, examples, models, cases -- "Horatio Alger" and self-made man)

5.b.6 -- Ethical and moral standards in work
Specific work ethics (hard work, instinct of workmanship, productivity, efficiency)
Sources -- historical (Protestant Ethic), business, occupational group, individual
Conflicts (pluralism in ethics)
Influence

5.c -- Sociological factors: focus on the group

5.c.1 -- Social aspects of the world of work (group, society, culture)
Production as a cooperative enterprise
Family as economic institution

5.c.2 -- Occupational stereotypes

5.c.3 -- Status, class, social prestige, methods of gaining social recognition

5.c.4 -- Group belongingness (core vs. marginal personality types)

5.c.5 -- Life styles, tastes, customs

6. Education and Its Economic Value

6.a -- In-school vocational education programs
Technical education
Distributive education
Business education
Home economics
Other occupationally-oriented program

6.b -- Education as investment in human resources

6.b.1 -- Concept of investment in human resources; contrast with consumer expenditures

6.b.2 -- Relation between schooling and earnings

6.b.3 -- Costs of education
Methods of calculating costs
Direct costs and opportunity costs
Costs to individuals and to society

6.b.4 -- Rates of returns to particular groups (micro)
Methods of calculating rates of return
Returns to individual worker
Returns to business firm

6.c -- Contribution of education to economic growth (macro)

6.d -- Social benefits of educating (not directly measurable by market flows)

6.e -- Financing education

6.e.1 -- Public schools, K-12

6.e.2 -- Higher education, public and private

6.e.3 -- Other

(NOTE: the following classifications will be developed in greater detail at a later time)

7. Evaluation of Project

7.a -- Evaluation design

7.a.1 -- Statistical methods

7.a.2 -- Other evaluation procedures

7.b -- Testing of students

7.b.1 -- For understanding

7.b.2 -- For attitudes and values

7.b.3 -- For behavior changes

8. <u>Curriculum</u>

8.a -- Materials for project design

8.b -- Materials for teachers

8.c -- Materials for students

April 7, 1967

TO: CFEE Staff

FROM: Robert Darcy, Director

SUBJECT: Procedures for Preparation of Student Materials, MD/OAEL

During the week of April 10 we will begin drafting the actual student materials to be used in our experimental eighth grade course, "Manpower Development/Opportunities in American Economic Life". The following guidelines are proposed for early efforts in preparing these student materials.

1. We anticipate that a typical lesson will consist of <u>one</u> or <u>two</u> <u>mimeographed pages</u> of reading material, data, art work, etc. to be handed out to the student at the beginning of the class period. Each day's lesson should be concise, highly significant, and motivational.

2. We want to use a variety of presentation techniques including:

    a. Narrative text
    b. Cases
    c. Models (diagrams, etc.)
    d. Tables of statistical data
    e. Graphs and charts
    f. Other

3. In all cases we want a <u>heading</u> either in the form of a question or a declarative statement that indicates precisely the purpose of the lesson. Then there should be a brief <u>statement</u> elaborating on the topic, something in the nature of a definition of the problem. Next there should be the <u>case</u>, <u>model</u>, <u>graph</u>, <u>table</u>, etc. and the appropriate explanation or narrative. Finally there should be a very concise <u>summary</u> and <u>conclusion</u>. This procedure involves identifying the problem, presenting analysis, and reaching a conclusion (even though the conclusion will be tentative and in fact might be simply that "no conclusion can be reached at this stage").

4. A tentative <u>allocation</u> of time and space for the course on the basis of the six major themes identified in our classification system, we intend to have the following number of lessons for each major topical area:

    #1--ANALYSIS, CHOICE, & DECISION-MAKING: <u>6-9 lessons</u>
    #2--WORLD OF ECONOMICS: <u>10-14 lessons</u>
    #3--WORLD OF WORK: <u>7-10 lessons</u>
    #4--LABOR MARKET STRUCTURE & PROCESSES: <u>22-30 lessons</u>
    #5--PSYCHOLOGY & SOCIOLOGY OF WORK: <u>8-10 lessons</u> (psychology)
    <u>10-14 lessons</u> (sociology)
    #6--EDUCATION & ITS ECONOMIC VALUE: <u>10-14 lessons</u>

TOTAL NUMBER OF LESSONS: 73-101. We anticipate needing about 85 lessons for the actual course and therefore have provided flexibility in our planning for expanding or limiting the treatment according to the experience we actually have in preparing materials. In other words, we may very well use the minimum number (six lessons for #1) or the maximum number (14 lessons for #2). We will not know for certain what the final allocation will be until we have actually drafted the lessons. One lesson is to be covered in a single class period of approximately 40 minutes. Time must be allowed for the student to read the mimeographed materials, for the teacher to explain or elaborate, and for class discussion. In other words, we want to take a small bite of material each day and allow adequate time for discussing and understanding the limited amount of information or the particular idea under study.

5. As a starting point for preparing the student materials it is suggested that the technical papers and card files be checked carefully, along with the outline of content as contained in the classification system, and that a list of approximately one to one-and-a-half times the maximum number of lessons listed in the schedule above be written out very concisely and discussed with me prior to beginning the actual writing of the lessons. In other words, for topic #6 dealing with the economic value of education, we'll want to list about sixteen major points which can be the core (fact or concept) around which a full lesson can be built. Before actually drafting the full lesson we can discuss these to see which ones ought to be worked on first and which ones might be considered tentative or marginal. That way we can be assured of writing lessons on the most important material -- the facts, ideas, and problem -- before going on the the less crucial material.

6. These procedures are, of course, subject to modification as experience dictates.

#

April 19, 1967

TO: CFEE Staff

FROM: Robert Darcy, Director

SUBJECT: Procedures for Preparing MD/OAEL Supplementary Materials and Suggestions for Teachers

This memorandum is a companion to the April 7 memo on "Procedures for Preparation of Student Materials, MD/OAEL".

The highest priority for any activity in the project during the period April 10 through June 30 will be given to the writing of student materials. However, there are two additional high-priority activities: preparation of the measurement instruments for testing understanding and attitudes; and preparation of supplementary materials and suggestions for teachers, to help the teachers present the student materials in the most interesting and effective manner.

In the process of writing student materials, we will be reviewing the outline of topics in the Classification System and examining Technical Papers, the Annotation Card File, and materials on the Shelf and Vertical Files. Ideas concerning methods of presenting and utilizing the student materials will naturally occur to the writers along with ideas about the content of the materials. In order to preserve these ideas and provide at least a point of departure for writing the "Supplementary Materials and Suggestions for Teachers", we want to make it standard procedure to prepare a page or two of notes (or rough-draft manuscript, at the writer's discretion) to accompany each unit of student material (i.e., each day's lesson). These notes should include the following:

-- A basic rationale for the lesson, so that the teacher can present the material in the broader perspective of the general topic (which may include a number of themes and daily lessons) and the overall course;

-- Thoughts on possible methods of presenting the material, such as discussion, role-playing, guest speaker, film strip, etc., including possible key questions or devices for launching discussion.

-- Complete citations of basic material and (including page numbers), along with two or three references for further reading (both for the teacher and, where appropriate, for students);

-- Other pertinent information and ideas.

Given the project's time constraint, our basic plan is to write all of the student materials first, construct the tests of understanding and attitude, and then write the "Supplementary Materials and Suggestions for Teachers". However, we want to assure that for every unit of student material, there is a file or set of notes on hand that subsequently will serve as the basis for two or three pages of material for the teacher. During July and August (and even September if necessary) attention can be directed to putting the teacher materials in finished form after the student materials are completed.

#

## APPENDIX IX

## MD/OAEL VISUAL ILLUSTRATIONS AND COMMENTARY

Ten original visual illustrations (i.e., drawings and photographs) were designed for the purpose of representing major themes emphasized in the MD/OAEL course. These were drawn and painted, in color, on 30" x 40" poster boards by Mr. George Cohen, Art Director, Learning Resource Center, Ohio University, based on sketches and commentaries provided by the project investigators. The original poster boards were then photographed in the Learning Resource Center to produce a set of 35 mm. color slides. Each project teacher received a set of slides for classroom use. In addition, the slides were used by the project staff in presentations to community and professional groups.

The poster boards were later photographed in black and white at Interstate Printers and Publishers for inclusion in the revised experimental edition of Manpower & Economic Education. Following is a list of the visuals, with page numbers indicating in parentheses where the visuals are located in Manpower & Economic Education (see Appendix I).

I. Technology Stimulates Economic Growth (pp. 8, 76, 248).

II. The World of Work: Resources, Technology, Institutions (pp. 12, 158, 202).

III. Education & Training to Develop Skills: The Bridge Between School and Work (pp. 48, 94, 194).

IV. The Changing World of Work (pp. 56, 130, 162).

V. Planning and Rational Decision-Making: Steps in Economic Reasoning (pp. 58, 176, 214).

VI. Roles in American Economic Life (pp. 80, 112, 292).

VII. The Changing American Economy: Agricultural Era, Industrial Era, Human Resources Era (pp. 100, 154, 224).

VIII. Success in the World of Work: The Manpower Market (pp. 116, 168, 206).

IX. The Economic Value of Education (pp. 142, 186, 230).

X. The Long Arm of the Job (pp. 148, 198).

As Appendix I shows, the visuals were used more than once (often in modified form) with commentary appropriate for the particular context.

APPENDIX X

PERSONNEL ASSOCIATED WITH MD/OAEL PROJECT
JULY 1, 1966 - JUNE 30, 1968

## Staff

Robert L. Darcy, PRINCIPAL INVESTIGATOR
Associate Professor of Economics and Director, Center for Economic Education, Ohio University, 1961-68. Assigned to project two-thirds time, 1966-67, and one-half time, 1967-68. (Effective September, 1968, Professor of Economics, Colorado State University.)
B. A. (Economics) Knox College (1950)
M. A. (Economics) Indiana University (1953)
Ph. D.(Economics) University of Colorado (1957)
Assistant Professor of Economics, Oregon State University, 1957-60
Assistant Professor of Economics, Kansas State University, 1960-61
Executive Director, Ohio Council on Economic Education, 1961-66 (part-time).

Phillip E. Powell, ASSOCIATE INVESTIGATOR
Research Associate in Manpower Education and Associate Director, Center for Economic Education, Ohio University, 1966-68. Assigned to project full-time, 1966-68. (Effective July, 1968, Director, Center for Economic Education, and Assistant Professor, Henderson State College, Arkadelphia, Arkansas.)
B. S., (Finance & Economics) Indiana University (1958)
M. A. T., (Social Studies) Indiana University (1960)
High School Social Studies Teacher, Ohio, 1960-66.

Mrs. Vicki Williams, SECRETARY
Secretary, Center for Economic Education, Ohio University. Assigned to project full-time, 1966-68.

Harry B. Crewson, ECONOMIST
Professor and Chairman, Department of Economics, Ohio University.
Project Economist, half-time, September 1966 - January 1967.

Mrs. Jean S. Powell, VOCATIONAL GUIDANCE CONSULTANT
Vocational Guidance Consultant, Center for Economic Education, Ohio University, part-time, April - August 1967.

University Consultants

Dr. Robert M. Boyd, CURRICULUM CONSULTANT
Professor of Education and Chairman, Department of Secondary Education, Ohio University.

Dr. Paul A. Games, STATISTICAL CONSULTANT
Professor of Psychology, Ohio University.

Dr. Samuel I. Hicks, EDUCATIONAL CONSULTANT
Professor of Education and Director, Center for Educational Research and Services, Ohio University. (Until September 1966).

Dr. Dean L. Hummel, GUIDANCE CONSULTANT
Professor of Education and Chairman, Department of Guidance, Counseling, and Student Personnel Services, Ohio University.

Outside Consultants

Joseph W. Duncan, MANPOWER CONSULTANT
Chief, Manpower and Regional Economics Division, Battelle Memorial Institute, Columbus, Ohio.

Dr. George L. Fersh, CURRICULUM CONSULTANT
Associate Director, Joint Council on Economic Education, New York, New York.

Miss Ann Murphy, CURRICULUM CONSULTANT
Teacher, Whitney Vocational High School, Toledo, Ohio.

William Papier, MANPOWER CONSULTANT
Director of Research and Statistics, Ohio Bureau of Employment Services, Columbus, Ohio.

Dr. Byrl Shoemaker, VOCATIONAL EDUCATION CONSULTANT
Director of Vocational Education, State of Ohio Department of Education, Columbus, Ohio.

Graduate Student Assistants

Stephen J. Emser (M.B.A. candidate, Accounting) September 1966 - June 1967.

Pho Tuyet Lan (M.B.A. candidate, Management) September 1967 - March 1968.

William N. Mann (M. Ed. candidate, Education) February - August 1967.

C. Douglas Parsons (M.A. candidate, Economics) September 1966 - August 1967.

James A. Schobel (M.A. candidate, Economics) July 1966 - August 1967.

Experimental School Personnel

TEACHERS:

David Thompson (General Business, Economics, & American History), Clinton Junior High School, Columbus, Ohio.

Robert Mathias (Social Studies), Thomas Ewing Junior High School, Lancaster, Ohio.

Joel E. Mullin (American History), Stanbery Junior High School, Lancaster, Ohio.

Donald R. Phillips (Social Studies), Lancaster High School, Lancaster, Ohio.

Gerald B. Woodgeard (American History), General Sherman Junior High School, Lancaster, Ohio.

Leroy A. Cranz (Economics and History), Theodore Roosevelt Junior High School, Zanesville, Ohio.

Richard A. Nash (Economics and Social Studies), Grover Cleveland Junior High School, Zanesville, Ohio.

Dean D. Nusbaum (Economics and Social Studies), Hancock Junior High School, Zanesville, Ohio.

COORDINATORS:

Mr. James Brown, Guidance Counselor, Lancaster (Ohio) High School.

Mr. Thomas Leidich, Social Studies Resource Teacher, Columbus (Ohio) Public Schools.

Mr. Ralph Storts, Assistant Superintendent, Zanesville (Ohio) Public Schools.

COUNSELORS:

Mr. Richard W. Beck, Guidance Counselor, Clinton Junior High School, Columbus, Ohio.

Mr. James W. Lawrence, Guidance Counselor, Thomas Ewing Junior High School, Lancaster, Ohio.

SUPERINTENDENTS:

Mr. Wallace E. Blake, Superintendent, Zanesville (Ohio) Public Schools.

Mr. J. E. Brown, Superintendent, Lancaster (Ohio) Public Schools.

Dr. Harold H. Eibling, Superintendent, Columbus (Ohio) Public Schools.

APPENDIX XI

TERMS OF AGREEMENT BETWEEN OHIO UNIVERSITY AND RESPECTIVE COOPERATING SCHOOL SYSTEMS

Ohio University Center for Economic Education, Athens, Ohio 45701

(date)

Dear (superintendent)

In order to clarify the cooperative relationship between the _____ City Schools and the Ohio University Center For Economic Education in implementing an Experimental Junior High School Course in Occupational Opportunities and Labor Market Processes ("Manpower Development: Opportunities in American Economic Life", code reference "MD/OAEL"), the following statement of agreement is submitted for review and endorsement.

TERMS OF AGREEMENT

I. Ohio University CFEE Agrees to:

1) Provide instructional and project evaluation materials for an 8th grade course designed to improve economic understanding relative to the changing world of work. Sufficient copies of STUDENT MATERIALS will be provided for distribution to every student enrolled in the course, and sufficient copies of TEACHER MATERIALS will be provided for all staff directly participating in the experimental course.

(Arrangements for possible use of project materials after completion of the experiment during the Fall semester 1967-68 will be subject to negotiations and agreements among the U. S. Office of Education, the Ohio University Center For Economic Education, and participating school systems.)

2) Provide a basic REFERENCE LIBRARY for each participating school building, which will become the permanent property of the school system.

3) Provide TRAINING and ORIENTATION for the instructional staff either on the Ohio University campus (in conjunction with the University's Summer NDEA Institute in Economics) or in the school community, or both.

4) Provide continuous CONSULTING SERVICES and staff help throughout the instructional period (i.e., Fall semester, 1967-68)

5) Consult regularly with the administrative officer designated by the superintendent of schools as "Project Coordinator" for the school system.

6) Coordinate all publicity and information releases and activities within the school system community with the designated Project Coordinator.

II. The (designated) City School System Agrees to:

1) Designate an administrative officer of the school system to serve as "PROJECT COORDINATOR" for the experimental program.

2) Enroll an appropriate number of STUDENTS in the experimental course during the Fall semester, 1967-68. (To be mutually determined and agreed upon by the School Systems' Project Coordinator and the Director of the Ohio University Center For Economic Education.)

3) Assign one teacher or more, and (where feasible) one vocational guidance counselor in each participating school building as responsible INSTRUCTIONAL PERSONNEL for teaching the experimental course, as well as appropriate equipment and facilities for implementing the instructional program.

4) CARRY OUT THE INSTRUCTIONAL PROGRAM as designed, including relevant presentations and activities by authorized non-school personnel.

5) Encourage each member of the instructional team to submit an application for participation in Ohio University's NDEA Institute in Economics (Athens, June 19-July 28, 1967), and to arrange for participation of the Project Coordinator and the instructional personnel in a PRE-SCHOOL WORKSHOP to review study materials and project procedures during the period August 18 - September 1, at a time and place to be subsequently agreed upon.

6) Cooperate in the administration of PRE-TESTS and POST-TESTS of ATTITUDES and of UNDERSTANDING at the beginning of the Fall semester, 1967-68, and at the end of the course, for all students enrolled in the experimental course and also a comparable number of students not enrolled in the course identified as the appropriate control group.

7) RESTRICT the distribution or use of the experimental instructional and evaluation materials to students, teachers, and other personnel identified as participants in the Project under terms of this agreement.

8) Provide sufficient time for the Project Coordinator and instructional personnel to CONSULT regularly with the Ohio University CFEE staff regarding progress of the Project.

9) Cooperate with CFEE staff in other EVALUATION activities before, during, and after the Fall semester, including interviews and observations of teachers and students.

10) Coordinate with the CFEE director all PUBLICITY and INFORMATION releases and activities concerning the Project, in advance of publication.

SUPPLEMENTARY DETAILS:
(Participating schools; name; address; principal; telephone.)

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AGREEMENT READ AND ENDORSED BY:

_____ Superintendent of _____ City Schools/_____
(Date)

_____ _____, _____ City Schools/_____
(Title) (Date)
(Project Coordinator for the _____ City Schools)

_____ Director, Ohio Univ. Center For Economic Education/_____
(Date)